

SONY®

VIDEOCASSETTE PLAYER

BVW-22P



BETACAM SP™

MAINTENANCE MANUAL

Volume 2 2nd Edition (Revised 5)

Serial No. 10061 and Higher

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17. SPARE PARTS AND FIXTURE

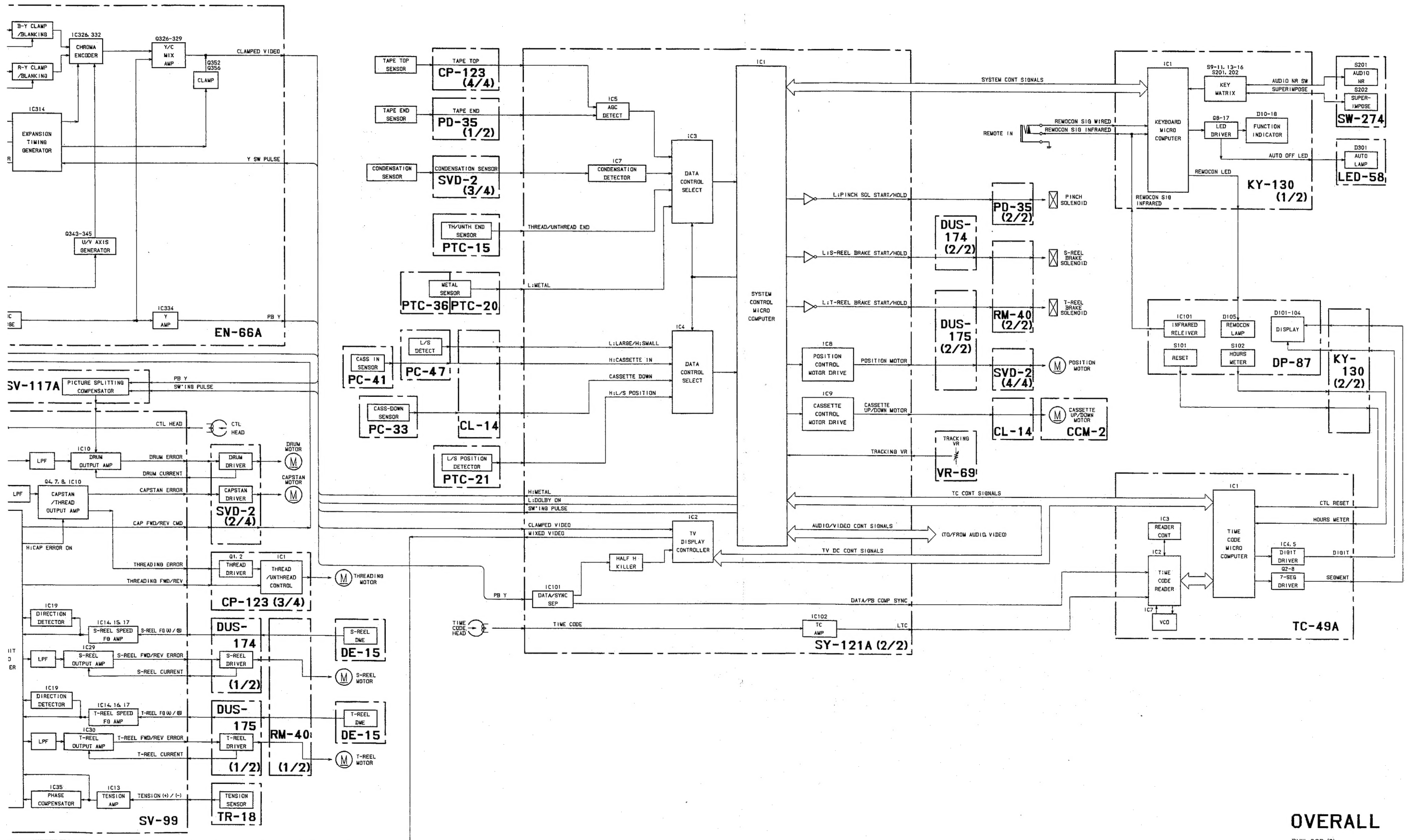
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SECTION 13
BLOCK DIAGRAMS

OVERALL **OVERALL**



OVERALL OVERALL

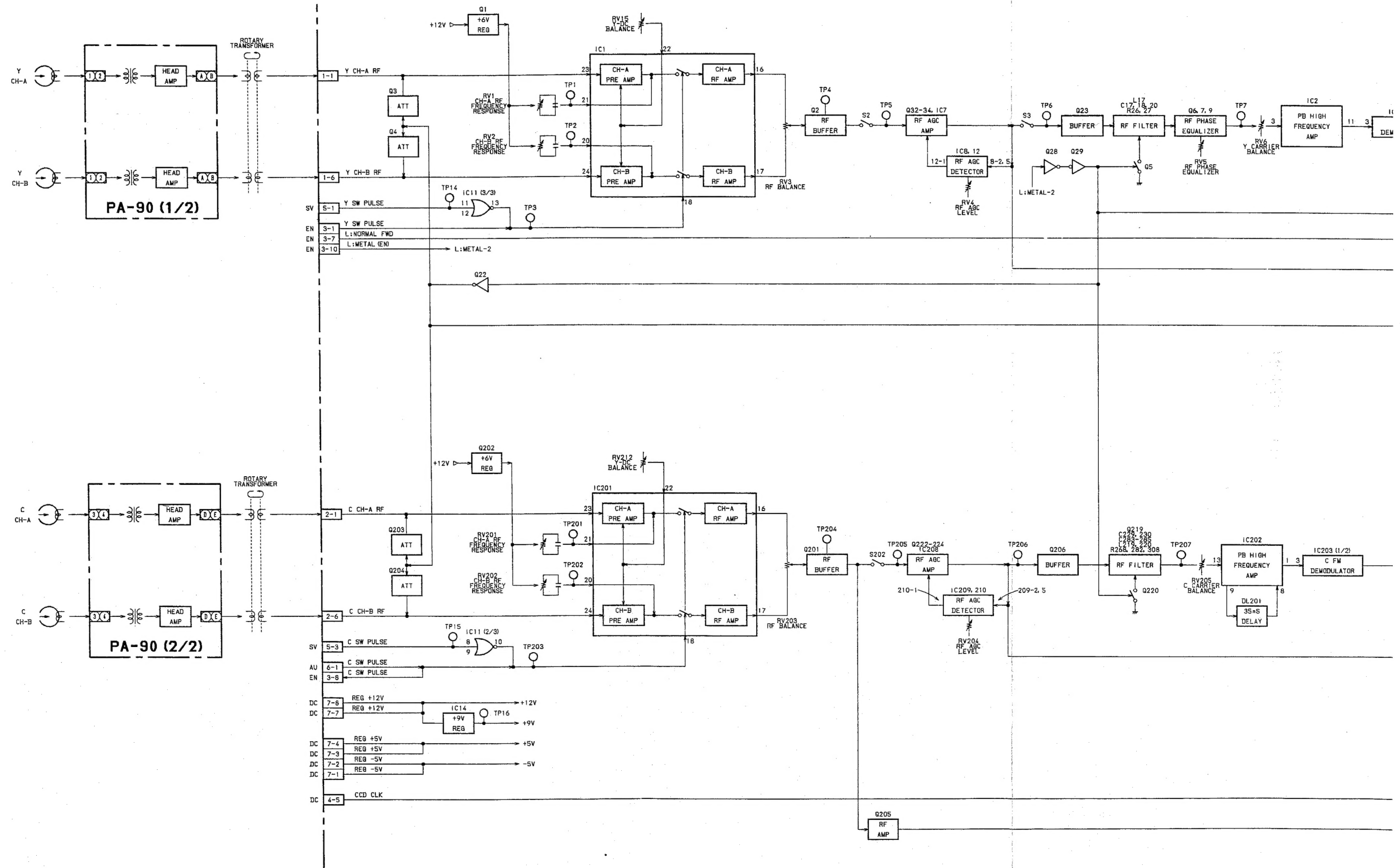


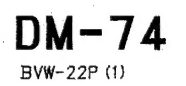
OVERALL

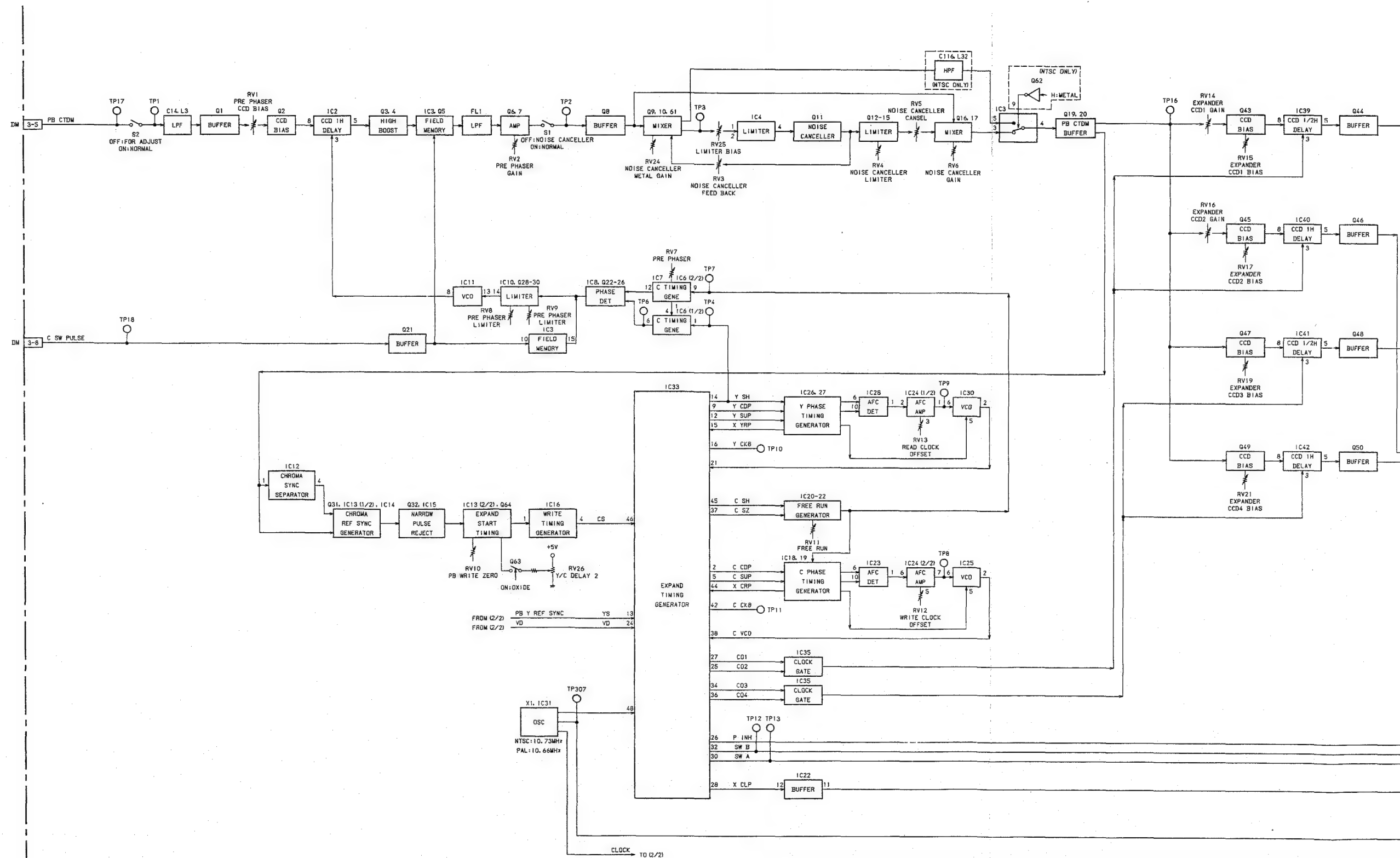
BVW-22P (2)

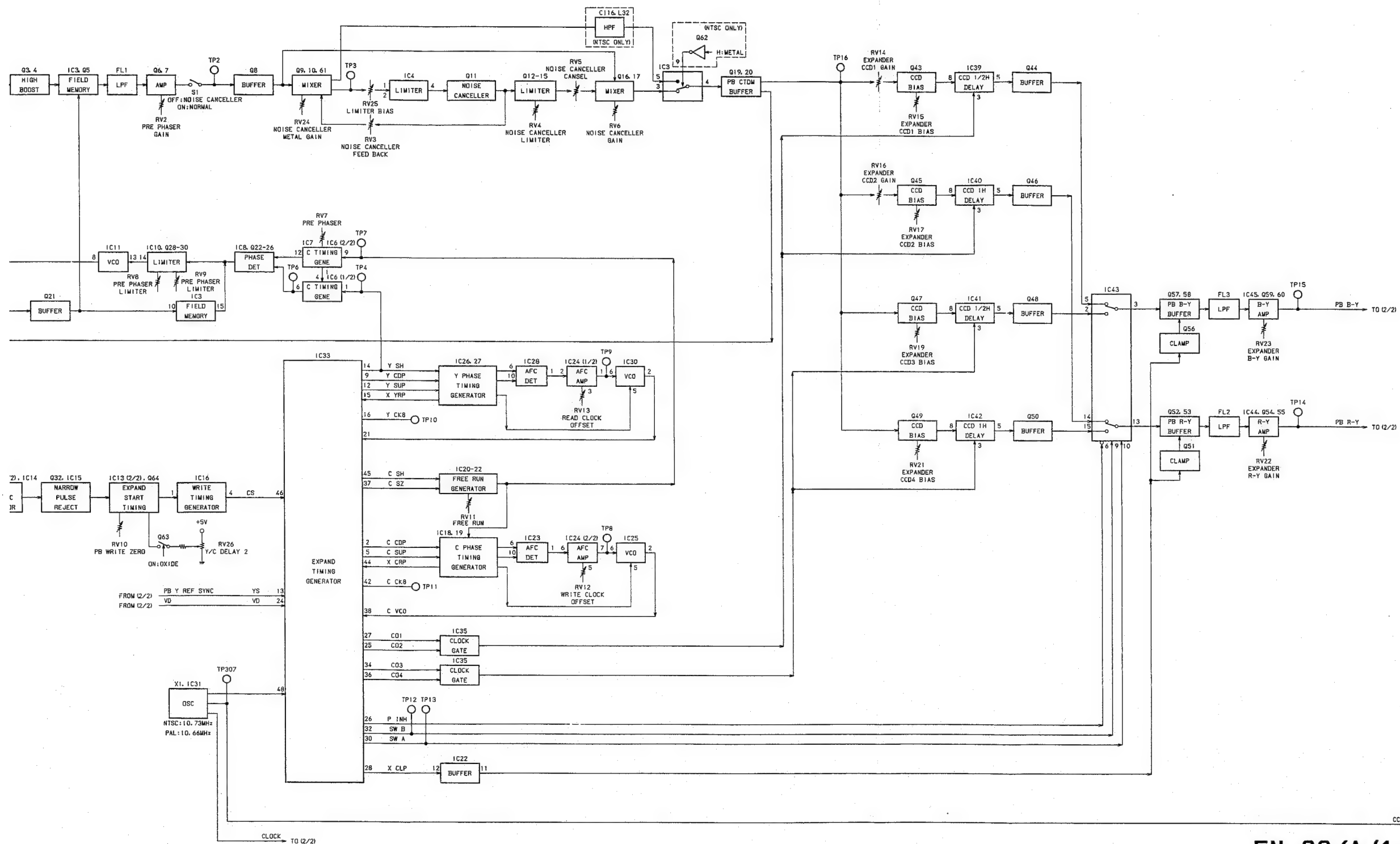
Y/C DEMODULATOR Y/C DEMODULATOR

Y/C DEMODULATOR







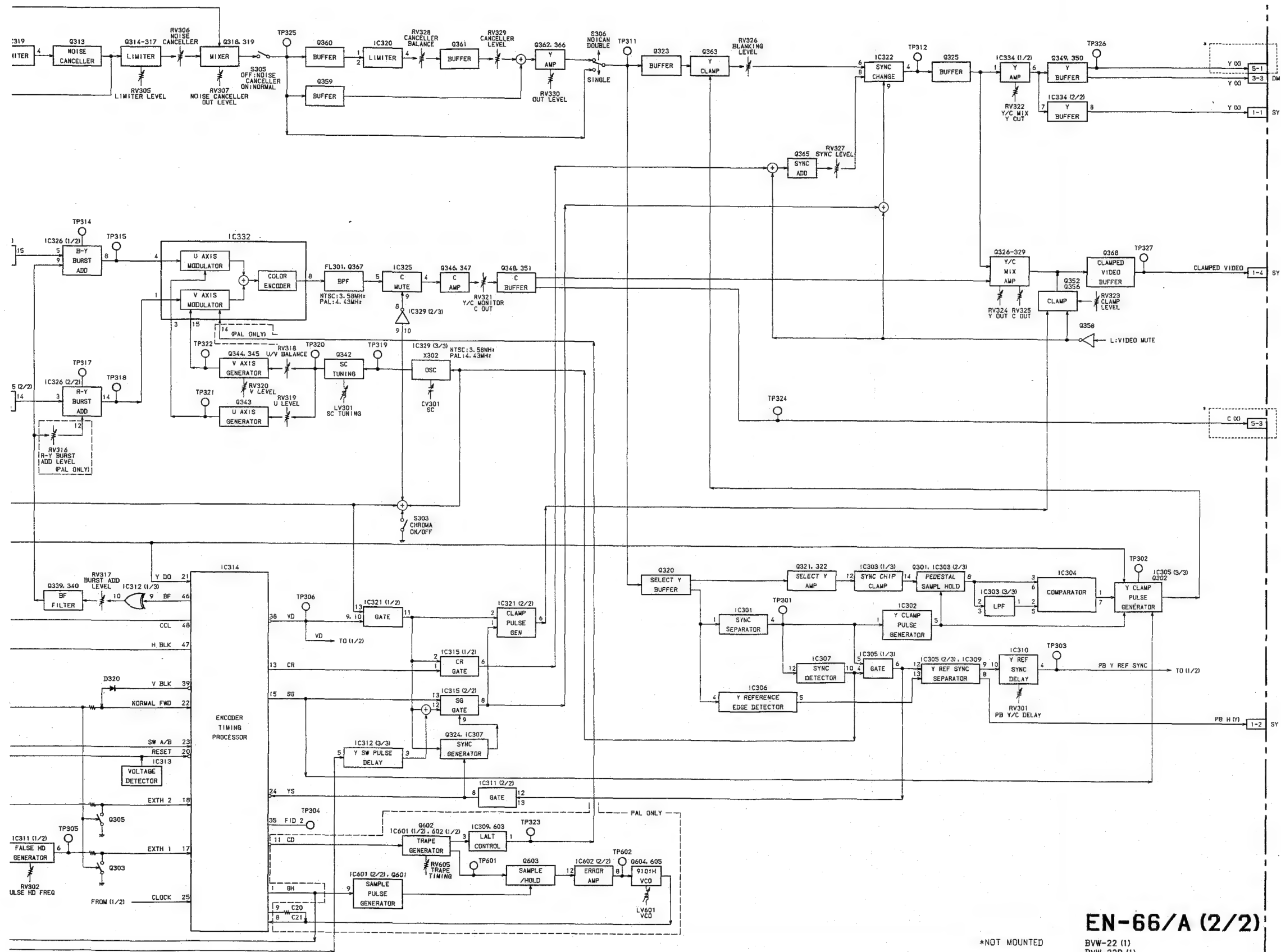


EN-66/A (1/2)

BVW-22 (1)
BVW-22P (1)

VIDEO ENCODER **VIDEO ENCODER**

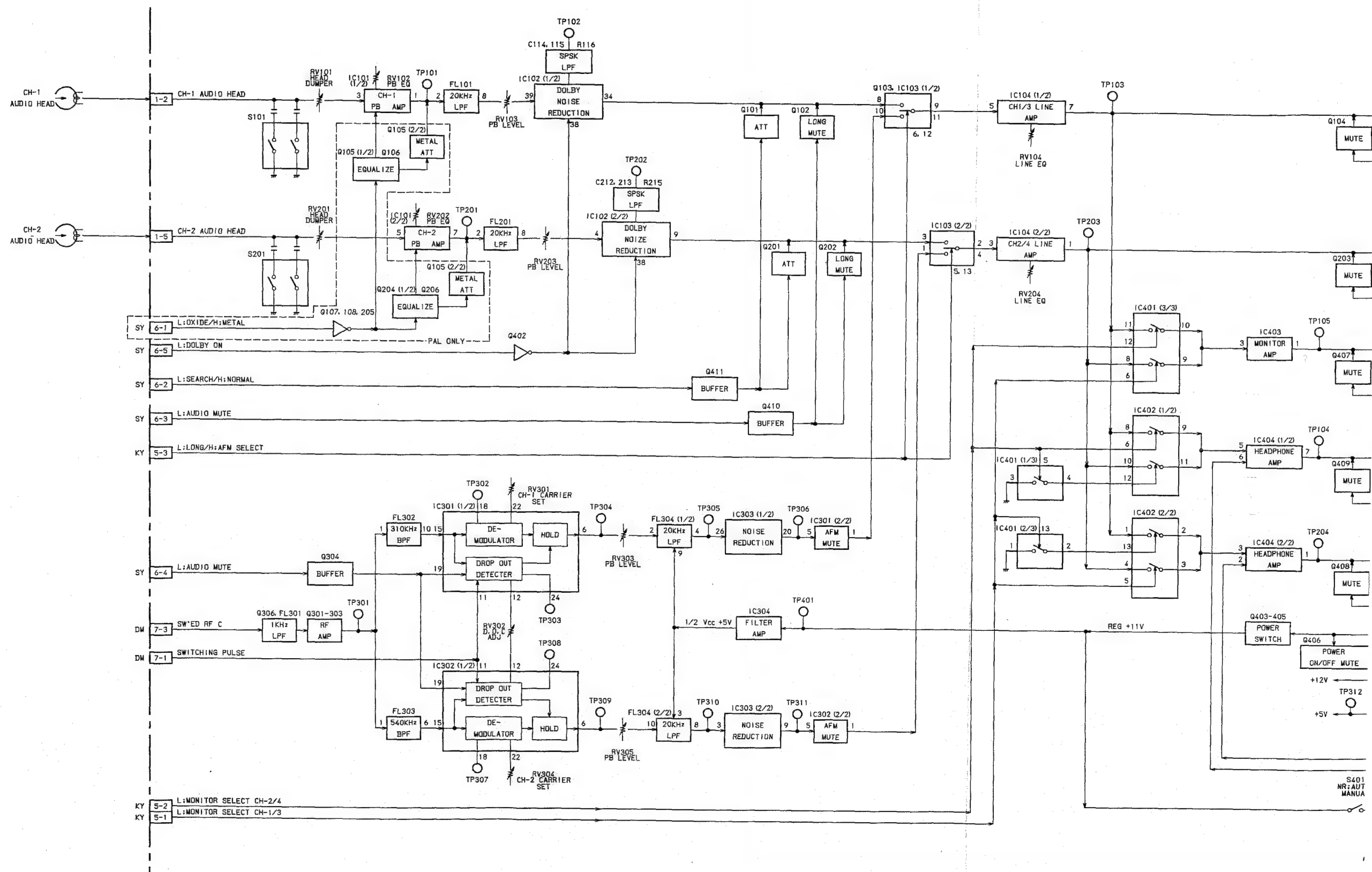




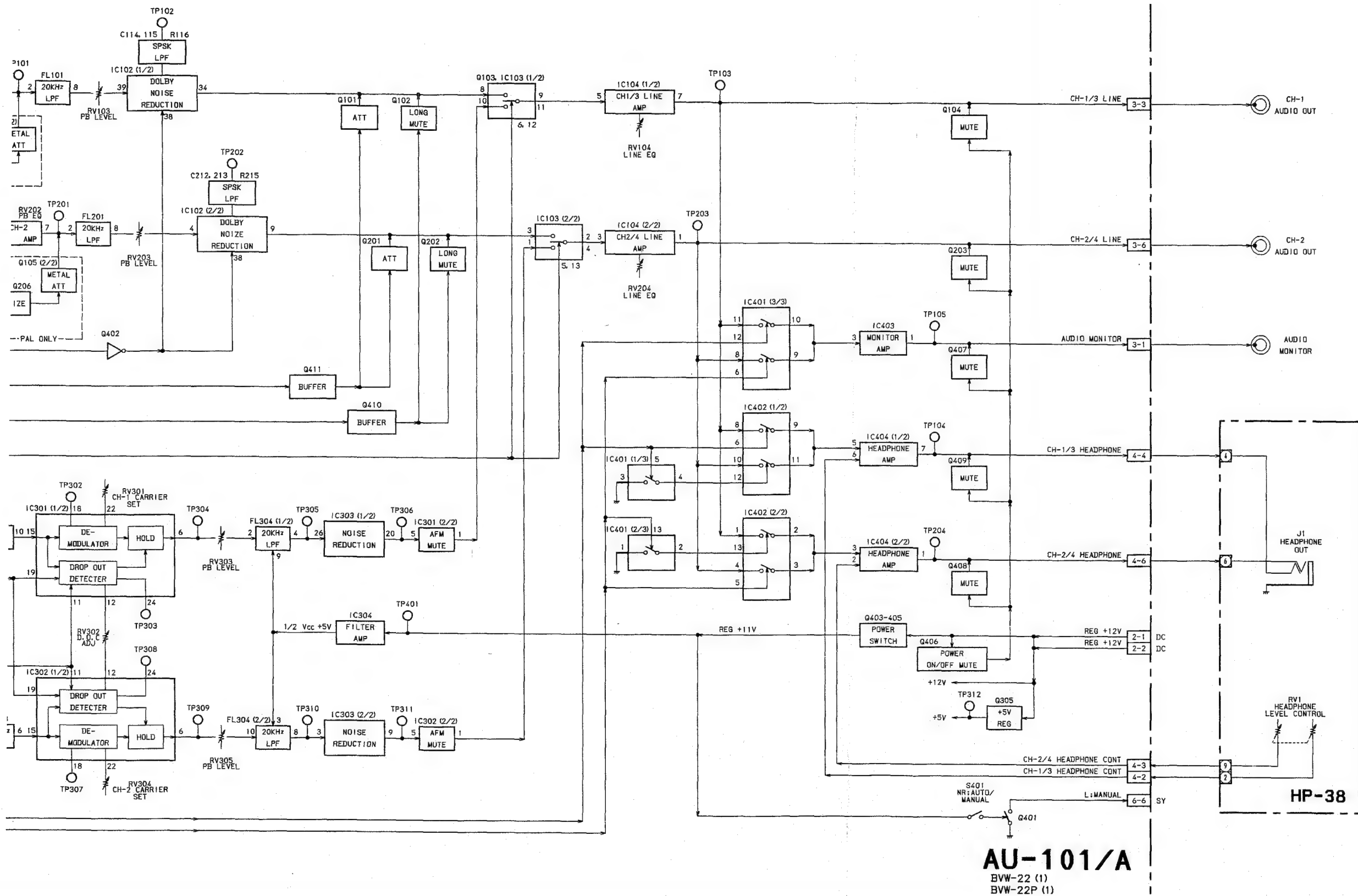
EN-66/A (2/2)

*NOT MOUNTED

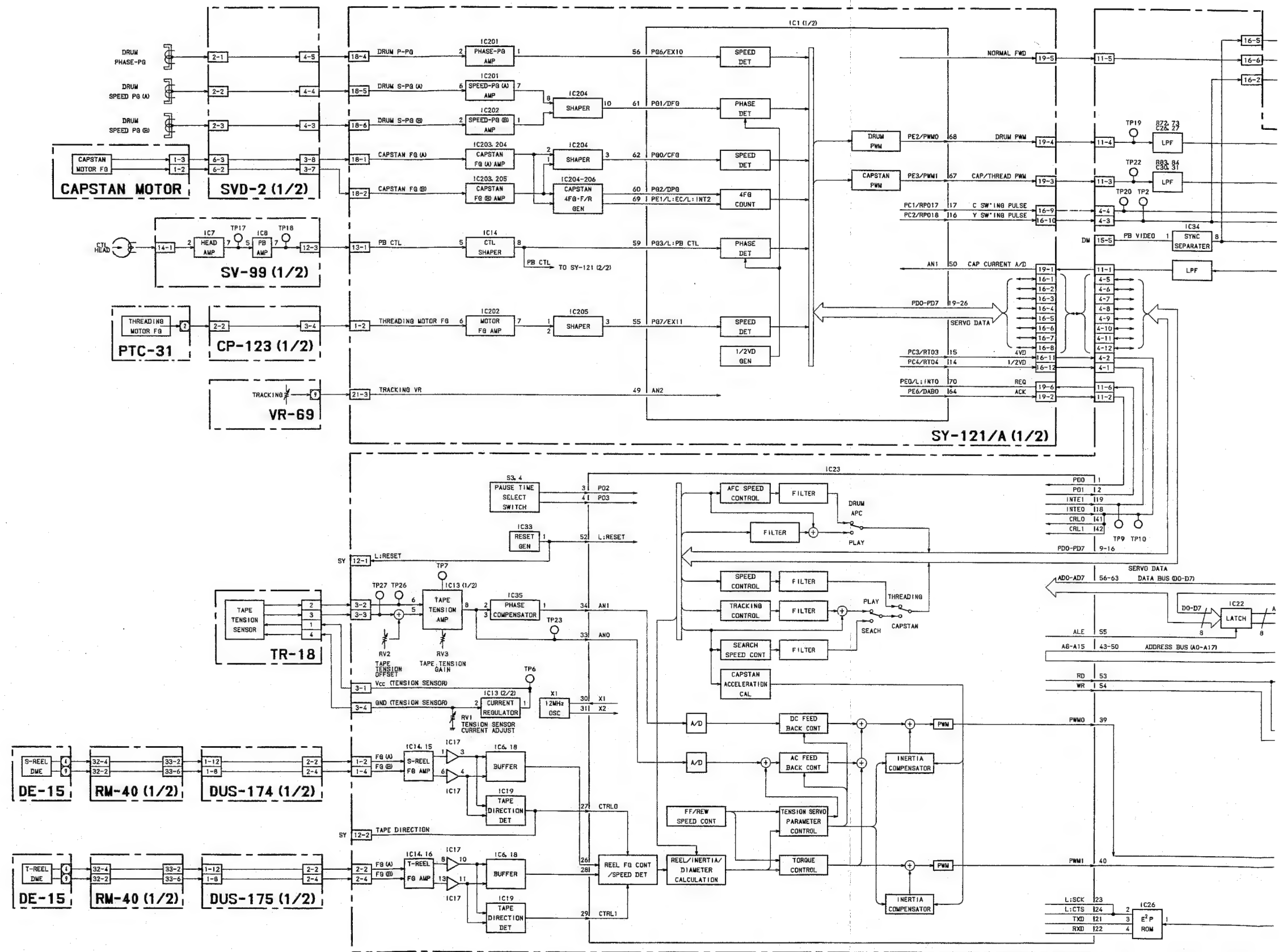
BVW-22 (1)
BVW-22P (1)

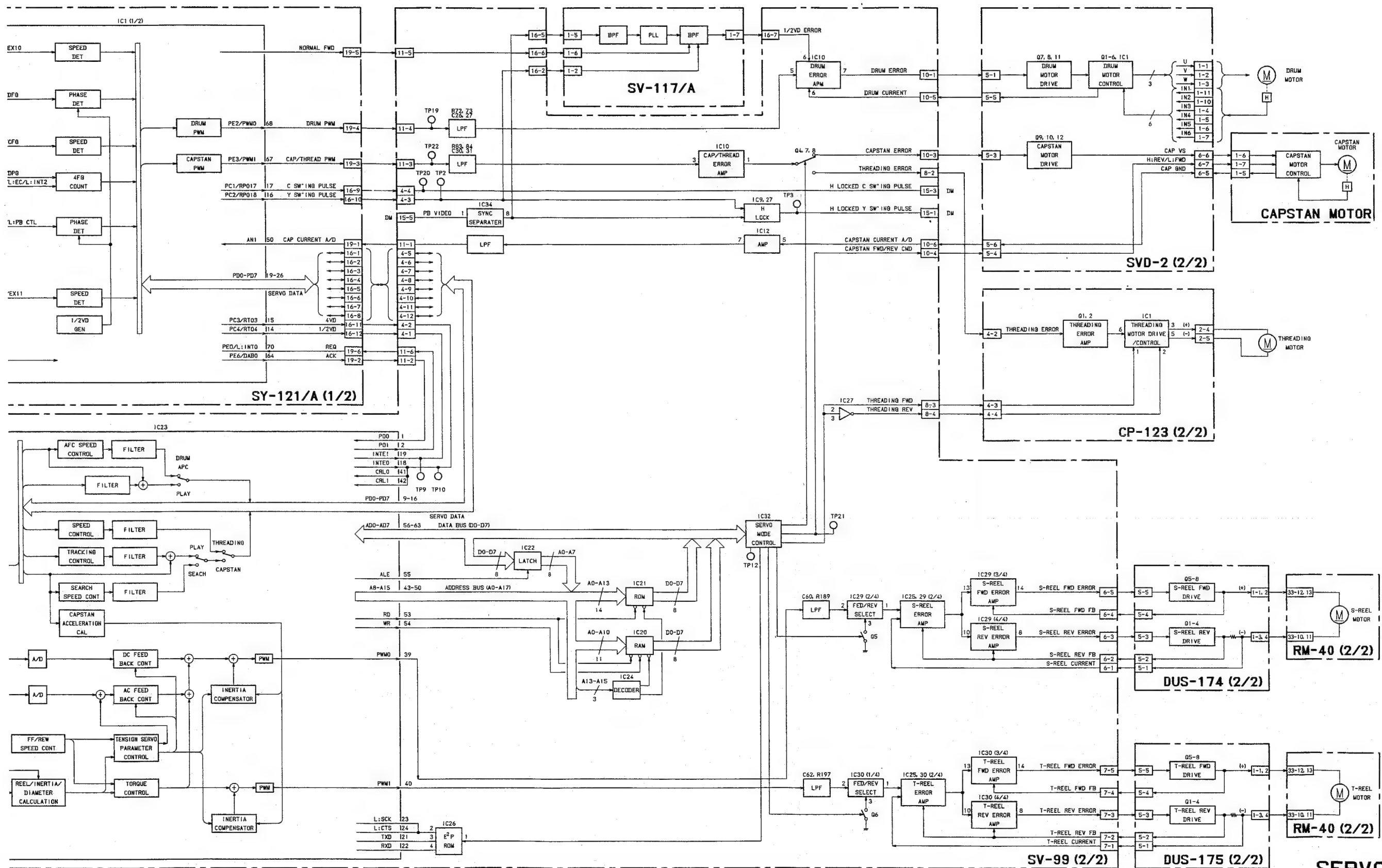


AUDIO AUDIO

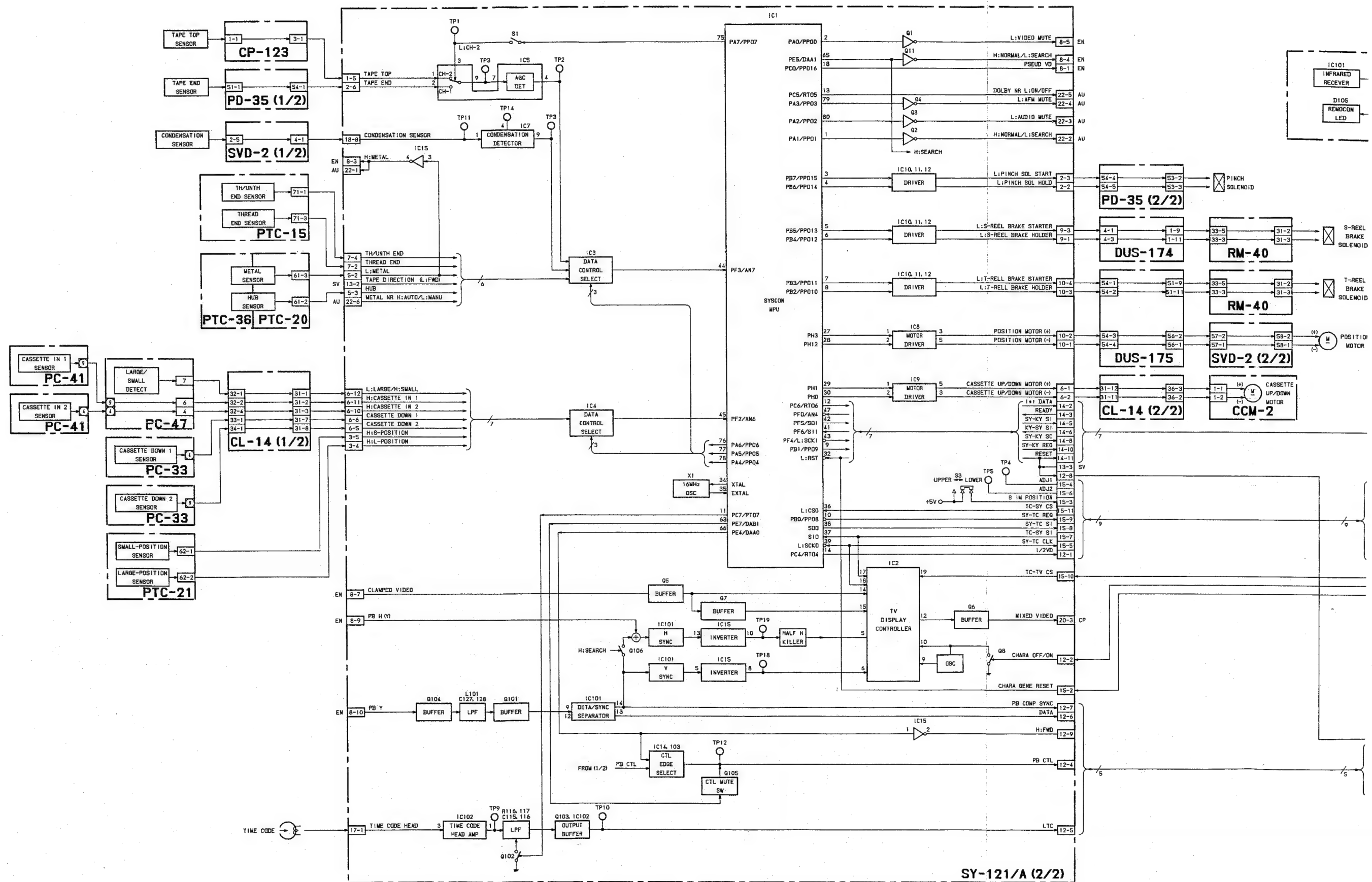


DRUM/CAPSTAN/REEL SERVO

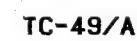




SYSTEM CONTROL & TIME CODE



SYSTEM CONTROL, TIME CODE



BVW-22 (2)
BVW-22P (2)

SECTION 14 SEMICONDUCTOR ELECTRODES

ここに記載されている IC, トランジスタ, ダイオードは, それぞれの機能を等価的に表わしたものです。したがって互換性を表わすものではありません。(互換性のない型名が併記されている事もあります。) 部品の交換をする時は, SPARE PARTS の章を参照して下さい。

ICs, transistors and diodes whoses functions are equivalent are described here. Therefore, incompatible device names may be described together. For parts replacement, refer to the Spare Parts section in this manual.

IC	PAGE	IC	PAGE	IC	PAGE
AN608P	14-3	NJM2043D-D	14-12	TC74HC139P	14-15
AN6391NK	14-3	NJM2903D	14-12	TC74HC151P	14-16
		NJM4556D	14-12	TC74HC32P	14-16
BX1140	14-3	NJM4558D-D	14-12	TC74HC373P	14-16
BX1461	14-3	NJM4560DD	14-12	TC74HC4050P	14-16
BX343	14-3	NJM4562D-D	14-12	TC74HC74P	14-16
BX389L	14-3	NJM78L02A	14-12	TC74HC86P	14-16
		NJM78L05A	14-12	TC74HCU04P	14-16
CX134A	14-3	NJM78M09A	14-12	TL082CP	14-16
CX20004	14-4	NJM79L03A	14-13	TL084CN	14-18
CX20148	14-4				
CX20158	14-4	PA0009	14-13	μ PC319C	14-18
CX20188	14-4	S-8053ALR	14-13	μ PC324C	14-18
CX22017	14-5	S-8054ALR	14-13	μ PC358C	14-18
CX23084	14-5	SI-3052V	14-13	μ PC4558C	14-12
CX7947	14-6	SN16913P	14-13	μ PD78310CW	14-17
CX7993A	14-6	SN74LS123N	14-13		
CX877	14-6	SN74LS221N	14-13		
CXL5001P	14-7	SN74LS624N	14-14		
CXL5002P	14-7				
CXK1011P	14-7	TA7060AP	14-14		
CXK5816PN-12L	14-8	TA7267P	14-14		
		TA7357AP	14-14		
DM-208	14-8				
		TC4016BP	14-14		
HD14046BP	14-8	TC4030BP	14-14		
		TC4052BPHB	14-14		
LA7205	14-8	TC4053BP	14-14		
		TC4066BP	14-15		
M50747-XXXSP	14-8	TC4069UBP	14-15		
M54516P	14-9	TC4071BP	14-15		
M54523P	14-9	TC4538BF	14-15		
M54532P	14-9	TC4538BP	14-15		
MB88323A	14-10	TC504013BP	14-15		
MB88505P	14-10	TC74HC00F	14-15		
MBM27128-25	14-11	TC74HC00P	14-15		
MN74HC4051S	14-12	TC74HC02P	14-15		
MN74HC4066S	14-12				

等価回路は IC メーカーの Data Book に従いました。

The circuit diagram of each IC is obtained from the IC data book published by the manufacturer.

TRANSISTOR PAGE

2SA111514-18
 2SA116214-18
 2SA117514-18
 2SA122614-18
 2SA84414-18
 2SB114014-18
 2SB73314-18
 2SC222314-18
 2SC245814-18
 2SC271214-18
 2SC271414-18
 2SC271514-18
 2SC278514-18
 2SC287814-18
 2SC332614-18
 2SC403SP14-18
 2SD1276A14-18
 2SD168514-18
 2SK20914-18
 2SD77314-18
 2SK52314-19
 2SK9414-18

DTA114EK14-19
 DTA124ES14-19
 DTA144ES14-19
 DTC124ES14-19
 DTC144ES14-19
 DTC144EK14-19

PH11014-19

TX429M14-19

DIODE PAGE

10E-214-19
 1S283514-19
 1S283714-19
 1SS11914-19
 1SS12314-19
 1SS9914-19
 1T3314-19

EBR3402S14-19

GL5HD514-19
 GL5HS4214-19
 GP2S0514-19

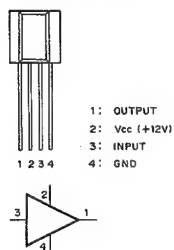
LB402VK14-19

RD??EB?14-19
 RD??EL?14-19
 RD??ESB?14-19
 RD??ESL?14-19
 RD??M14-19

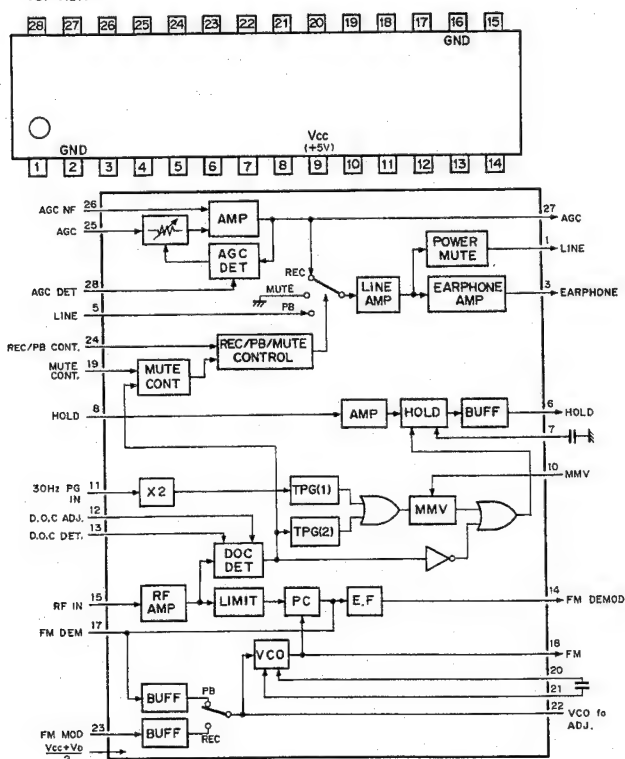
SE31014-19

TLG25514-19
 TLP801A14-19

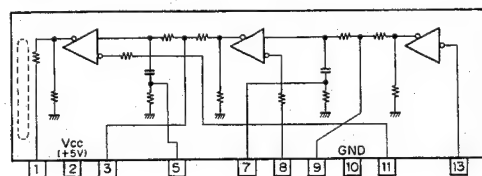
AN608P (MATSUSHITA)
WIDE BAND AMPLIFIER
— PRINTED SIDE VIEW —



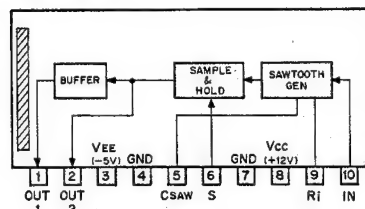
AN6391NK (MATSUSHITA)
AUDIO FM REC/PB AMP
— TOP VIEW —



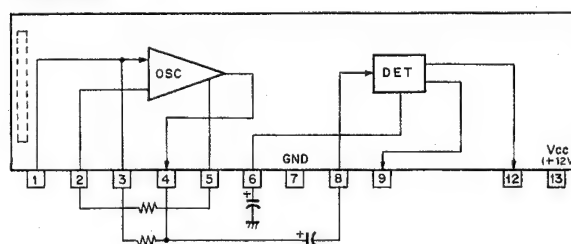
BX1140 (SONY)
HF AMP
— REAR VIEW —



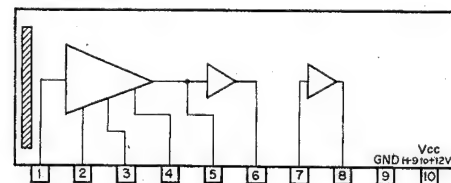
BX1461 (SONY)
PHASE DETECTOR
— PRINTED SIDE —



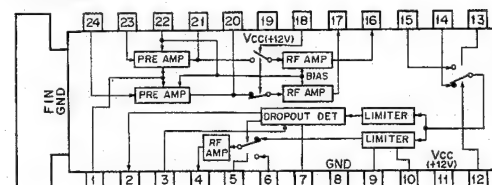
BX343 (SONY)
OSCILLATOR/DETECTOR
— REAR VIEW —



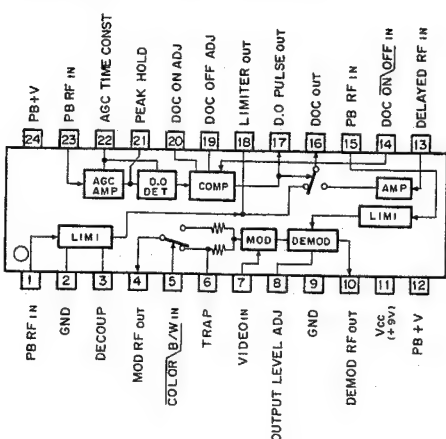
BX389L (ROHM)
VIDEO AMPLIFIER
— PRINTED SIDE —



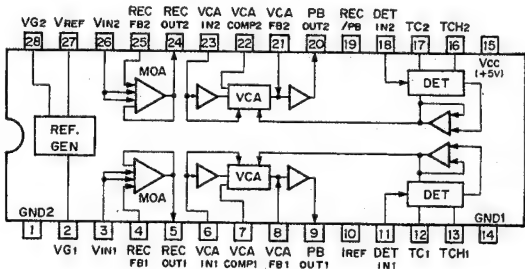
CX134A (SONY)
HEAD AMP/DROPOUT COMPENSATOR
— TOP VIEW —



CX20004 (SONY) FLAT PACKAGE
FM MOD/DEMODULATOR/DROPOUT COMPENSATOR
— TOP VIEW —

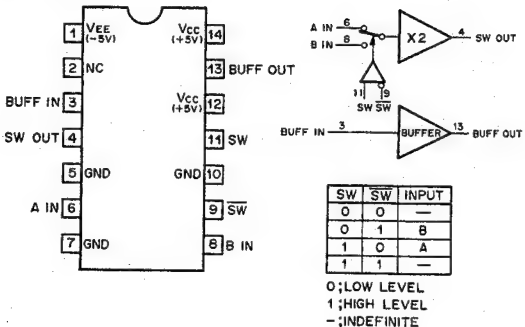


CX20148 (SONY)
VOLTAGE CONTROLLED AMP/DETECTOR/MAIN OPERATIONAL AMP
— TOP VIEW —

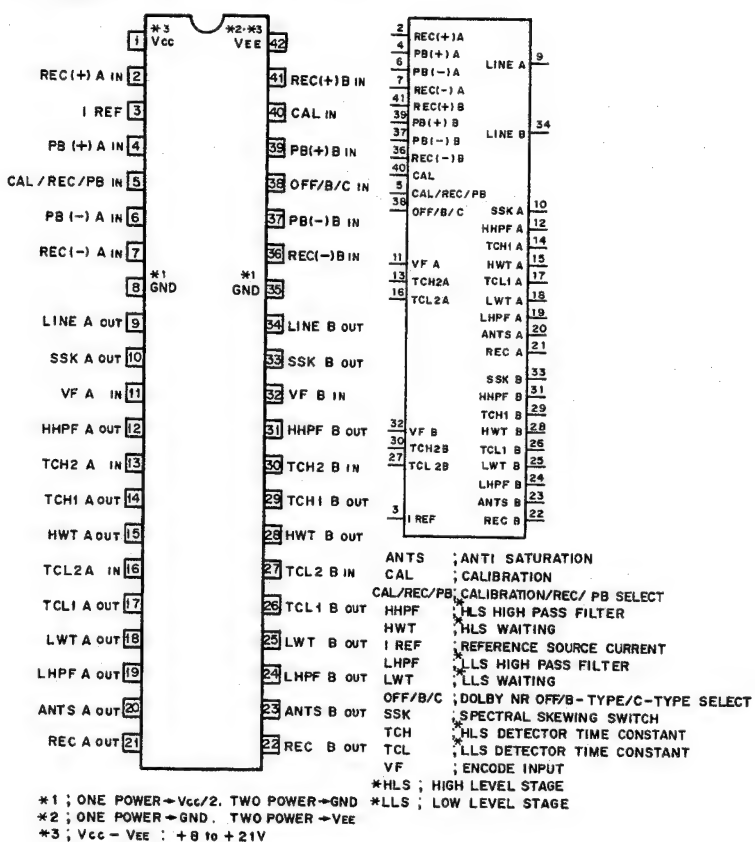


DET ; DETECTOR
TC ; TIME CONSTANT
TCH ; TIME CONSTANT HOLD
VCA ; VOLTAGE CONTROLLED AMP

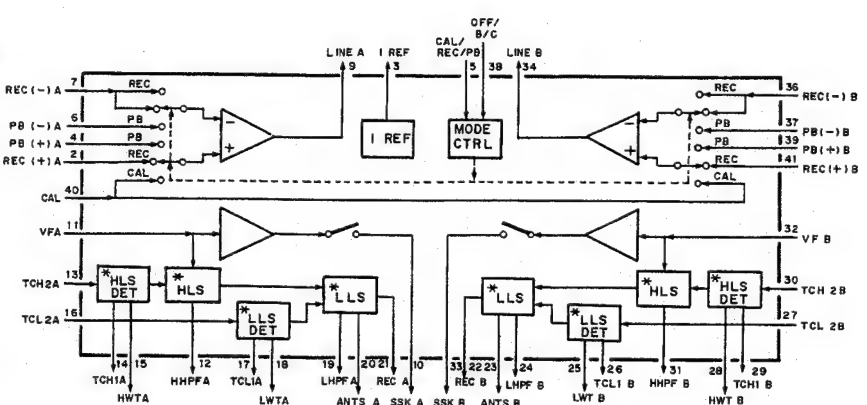
CX20158 (SONY)
VIDEO SWITCHER AND BUFFER
— TOP VIEW —



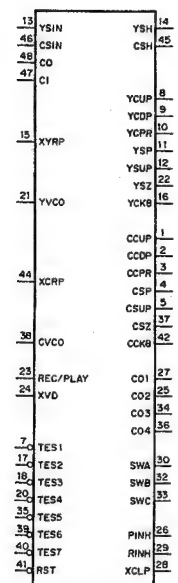
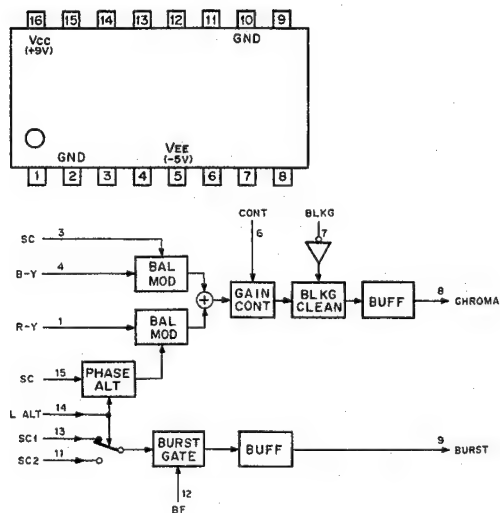
CX20188 (SONY)
DOLBY B TYPE AND C TYPE, NOISE REDUCTION SYSTEM
— TOP VIEW —



*1 ; ONE POWER → Vcc/2. TWO POWER → GND
*2 ; ONE POWER → GND. TWO POWER → VEE
*3 ; Vcc - VEE : +8 to +21V

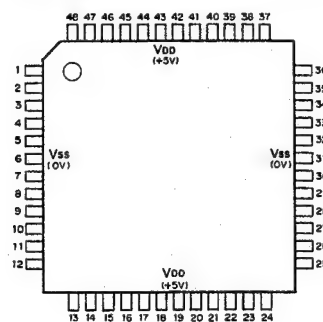


CX22017 (SONY)
VIDEO SIGNAL PROCESSOR
— TOP VIEW —



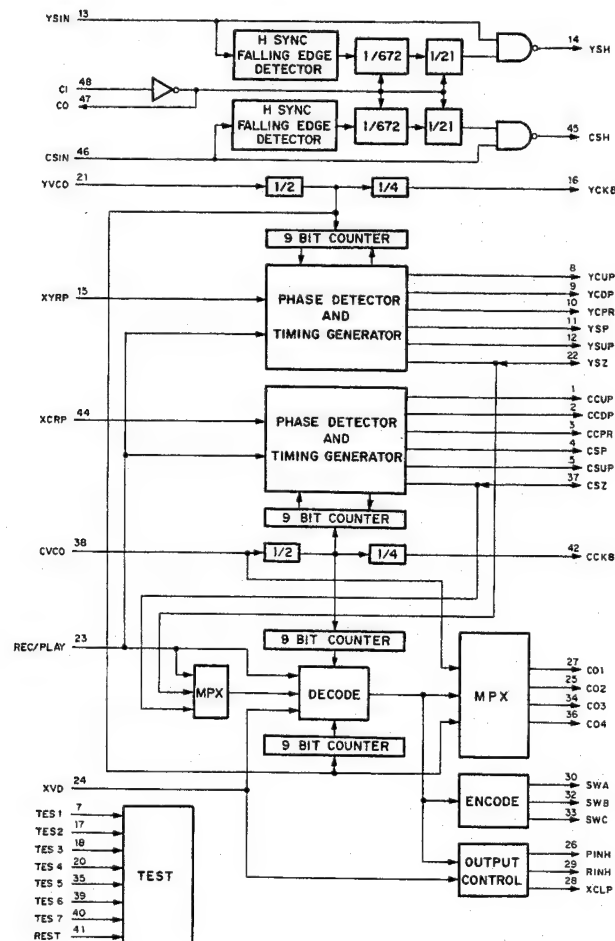
CCDP; CHROMA CHARGE DOWN PULSE OUT
CCKB; CHROMA VCO 1/8 COUNT DOWN OUT
CCPR; CHROMA CHARGE PUMP RESET PULSE OUT
CCUP; CHROMA CHARGE UP PULSE OUT
CI; CLOCK IN(SELECTED H)
CO; CLOCK OUT(SELECTED H)
CO1-4; CLOCK OUT(CCD DRIVE)
CSH; CHROMA SELECTED H OUT
CSIN; CHROMA HORIZONTAL SYNC IN
CSP; CHROMA SAMPLING PULSE OUT
CSUP; CHROMA SPEED UP PULSE OUT
CSZ; CHROMA SYNC ZERO OUT(PLAYBACK)
CVCO; CHROMA VCO CLOCK IN
PINH; PLAY INHIBIT OUT
REC/PLAY; REC/PLAY SELECT IN
RST; RESET IN
RINH; REC INHIBIT OUT
SWA,SWB,SWC; CCD READ DATA SELECT A,B,C OUT
TES1-7; TEST1-7 IN
XCLP; CHROMA CLAMP OUT
XCRP; CHROMA VCO RESET PULSE IN
XYRP; Y VCO RESET PULSE
XVD; VD IN
YCDP; Y CHARGE DOWN PULSE OUT
YCKB; Y VCO 1/8 COUNT DOWN OUT
YCPR; Y CHARGE PUMP RESET PULSE OUT
YCUP; Y CHARGE UP PULSE OUT
YSH; Y SELECTED H OUT
YSIN; Y HORIZONTAL SYNC IN
YSP; Y SAMPLING PULSE OUT
YSUP; Y SPEED UP PULSE OUT
YSZ; Y SYNC ZERO(RECORD)
YVCO; Y VCO CLOCK IN

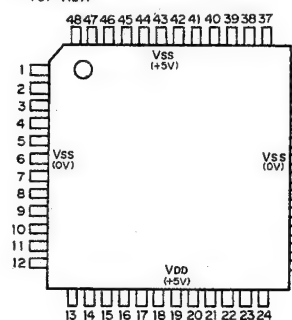
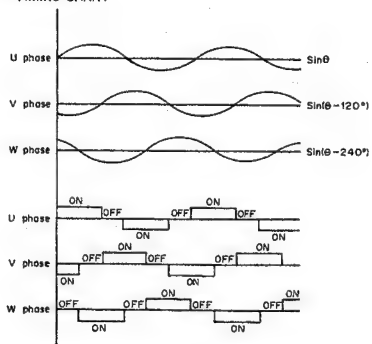
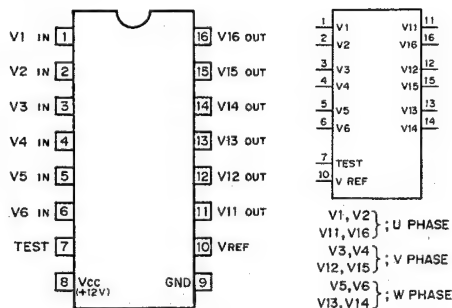
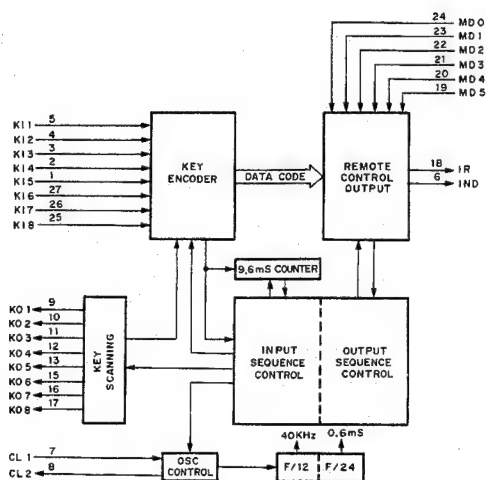
CX23084 (SONY) FLAT PACKAGE
C-MOS TIMING GENERATOR/CCD CLOCK GENERATOR
— TOP VIEW —



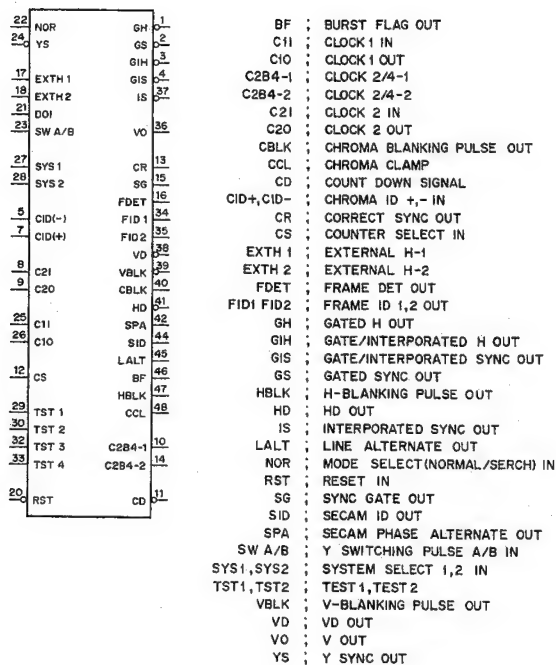
PIN ASSIGNMENT

PIN NO	IN	OUT	SYMBOL	PIN NO	IN	OUT	SYMBOL	PIN NO	IN	OUT	SYMBOL
1			CCUP	13			YSIN	25			CO2
2			CCDP	14			YSH	26			PINH
3			CCPR	15			XYRP	27			CO1K
4			CSP	16			YCKB	28			XCLP
5			CSUP	17			TES2	29			RINH
6			CSUP	18			TES3	30			SWA
7			TES1	19			Vdd	31			Vss
8			YCUP	20			TES4	32			SWB
9			YCDP	21			YVCO	33			SWC
10			YCPR	22			YSZ	34			CO3
11			YSP	23			REC/PLAY	35			TES5
12			YSUP	24			XVD	36			CO4

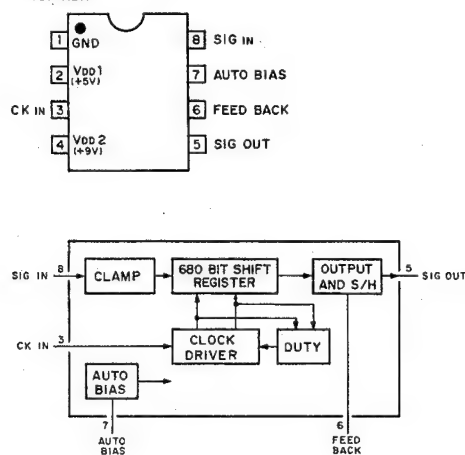




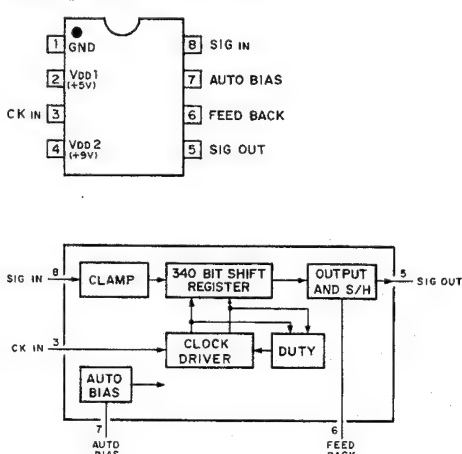
IN	OUT	SYMBOL	IN	OUT	SYMBOL	IN	OUT	SYMBOL	IN	OUT	SYMBOL
1	○	GH	13	○	CR	25	○	C11	37	○	T3
2	○	GS	14	○	C2B4-2	26	○	C10	38	○	VBLK
3	○	GH	15	○	SG	27	○	SYS 1	39	○	VBLK
4	○	GTS	16	○	FDET	28	○	SYS 2	40	○	CBLK
5	○	CID -	17	○	EXTH 1	29	○	T 1	41	○	HD
6	○	VSS	18	○	EXTH 2	30	○	T 2	42	○	SPA
7	○	CID +	19	○	Vpp	31	○	VSS	43	○	Vpp
8	○	C21	20	○	RST	32	○	T 3	44	○	SID
9	○	C20	21	○	DOI	33	○	T 4	45	○	LALT
10	○	C2B4-1	22	○	NOR	34	○	FID 1	46	○	BF
11	○	CD	23	○	SW A/B	35	○	FID 2	47	○	HBLK
12	○	CS	24	○	YS	36	○	VO	48	○	CCl



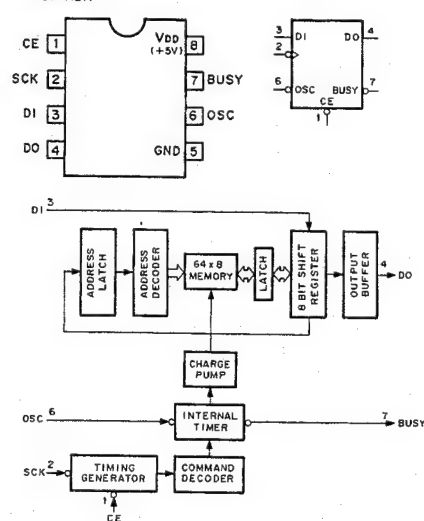
CXL5001P (SONY)
C-MOS CCD FOR NTSC 1H DELAY LINE
— TOP VIEW —



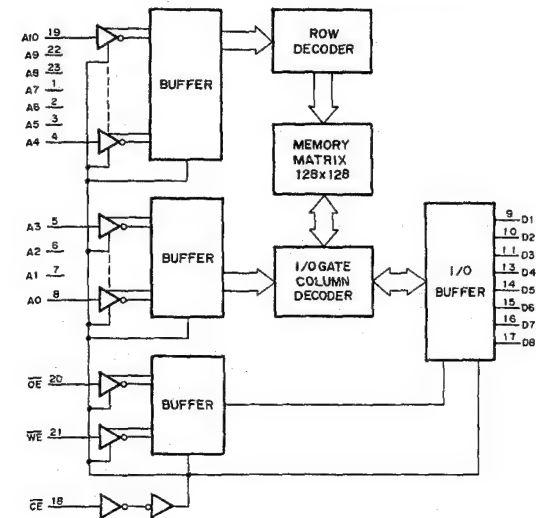
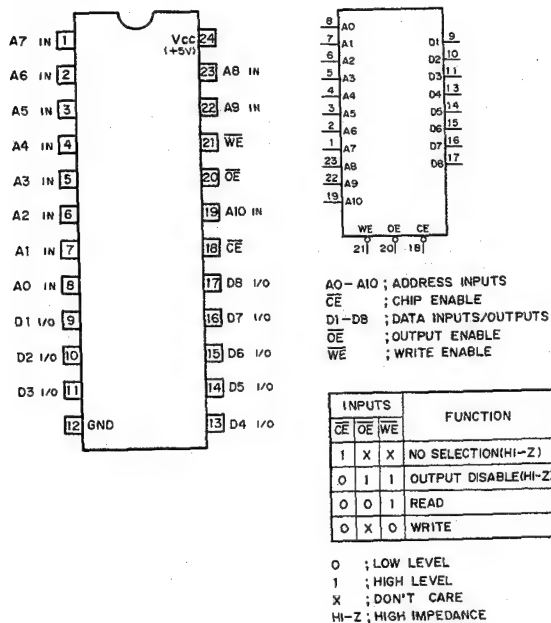
CXL5002P (SONY)
C-MOS CCD FOR NTSC 1/2H DELAY LINE
— TOP VIEW —



CXK1011P (SONY)
N-MOS 512-BIT (64x8) NON-VOLATILE MEMORY
— TOP VIEW —

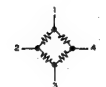


CXK5816PN-12L (SONY) (ACCESS TIME=120ns)
C-MOS 16384-BIT (2048x8) STATIC RAM
— TOP VIEW —

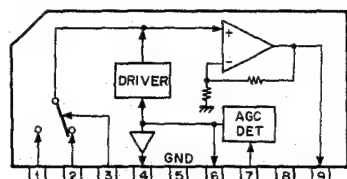


TOP VIEW DM208

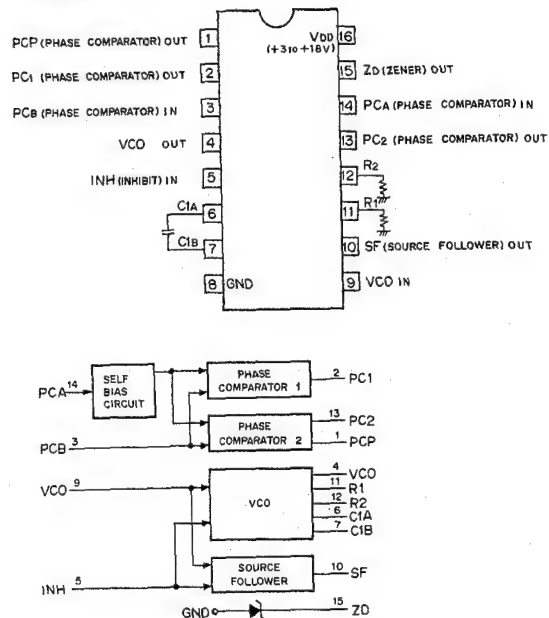
Equivalent Circuit



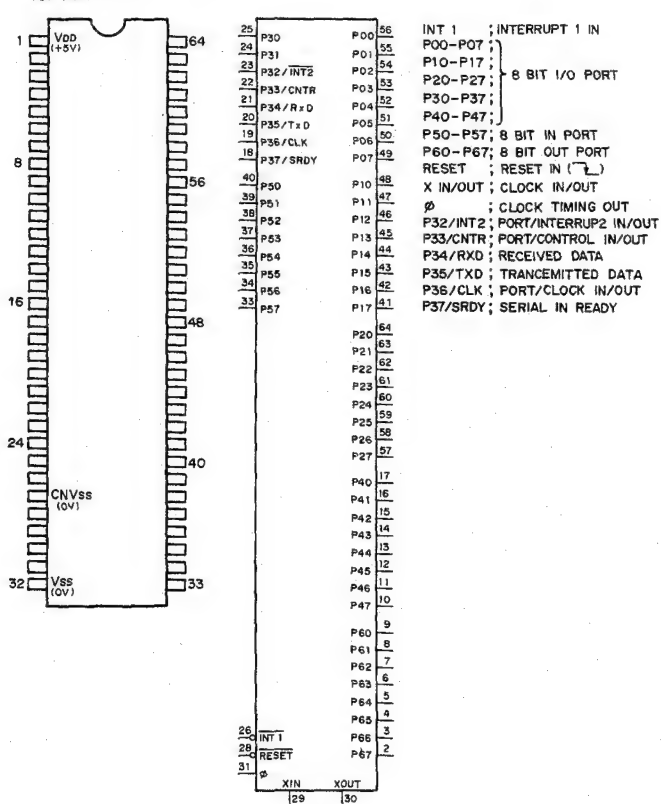
LA7205 (SANYO)
AGC AMP, INPUT SELECT, AGC DET. COMPARTOR
— SIDE VIEW —

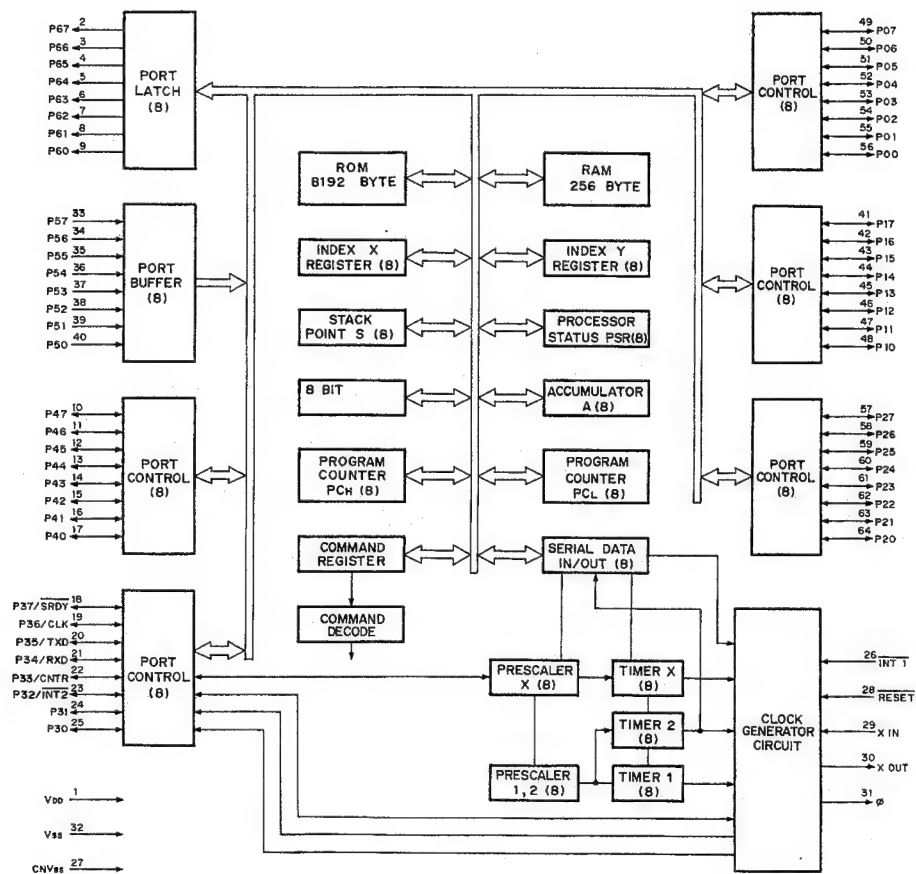


HD14046BP (HITACHI)
C-MOS PHASE LOCKED LOOP
— TOP VIEW —

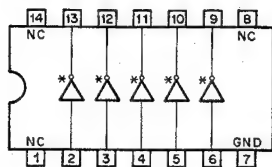


M50747-XXXSP
C-MOS PROCESS 8-BIT ONE CHIP MICROCOMPUTER
— TOP VIEW —

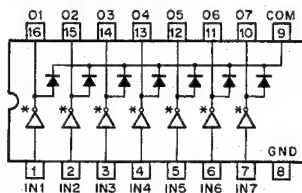




M54516P (MITSUBISHI)
INVERTER WITH OPEN-COLLECTOR
(DARLINGTON-CONNECTED TRANSISTOR ARRAY)
— TOP VIEW —

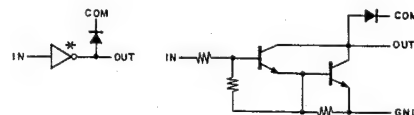
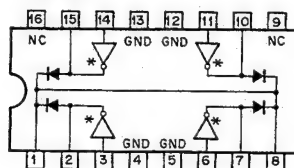


M54523P (MITSUBISHI)
BIPOLAR TRANSISTOR ARRAY WITH OPEN COLLECTOR
— TOP VIEW —

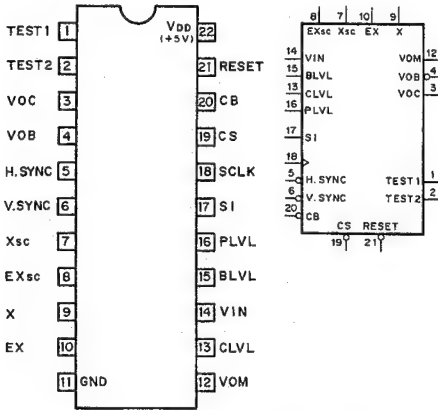


COM : COMMON

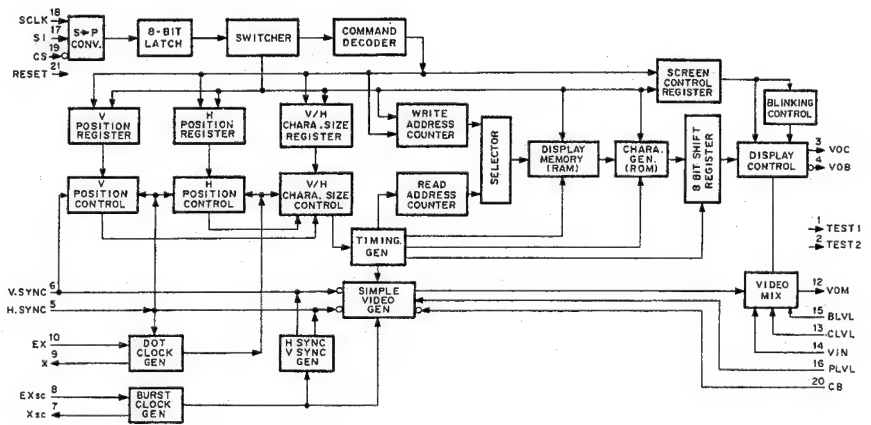
M54532P (MITSUBISHI)
DARLINGTON TRANSISTOR ARRAY WITH CLAMP DIODE
— TOP VIEW —



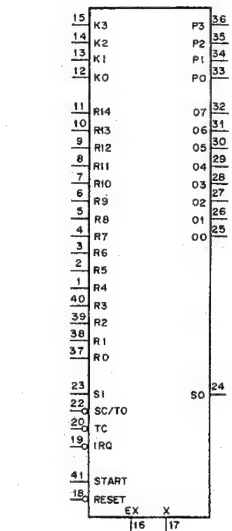
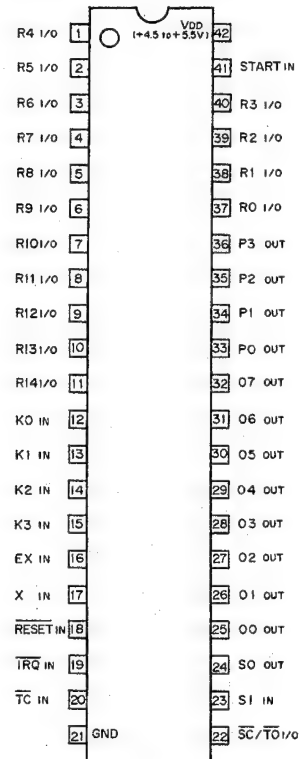
MB88323A (FUJITSU)
CMOS PROGRAMMABLE TV DISPLAY CONTROLLER
— TOP VIEW —



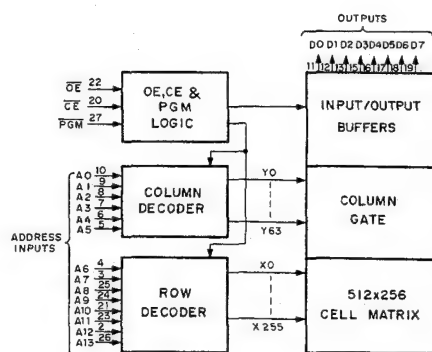
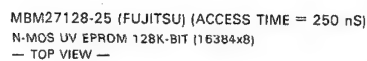
BLVL : BORDER OR BACKGROUND ANALOG LEVEL INPUT
CB : COLOR BURST DETECTION INPUT
CLVL : CHARACTER ANALOG LEVEL INPUT
CS : CHIP SELECT INPUT
EX : DOT CLOCK INPUT
EX_{sc} : COLOR BURST CLOCK INPUT
SI : SERIAL DATA INPUT
TEST1 : CHIP TEST OUTPUT
TEST2 : (NORMALLY SET TO OPEN)
VOB : BORDER OR BACKGROUND SIGNAL OUTPUT
VOC : CHARACTER SIGNAL OUTPUT
VOM : VIDEO/CHARACTER/BORDER OR BACKGROUND MIX OUTPUT
X : DOT CLOCK OUTPUT
X_{sc} : COLOR BURST CLOCK OUTPUT



MB88505P (FUJITSU)
CMOS 4-BIT ONE-CHIP MICROCOMPUTER
— TOP VIEW —

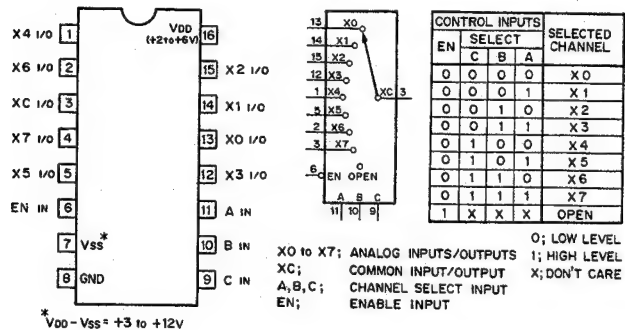
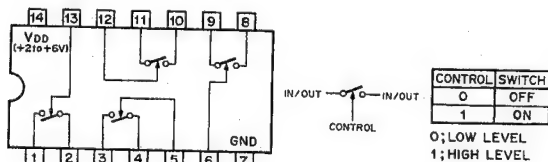
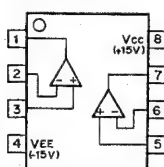
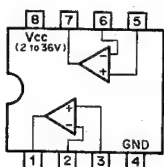
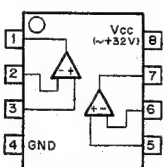
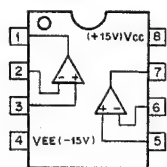
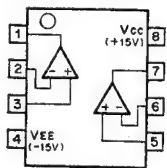
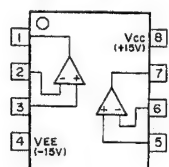
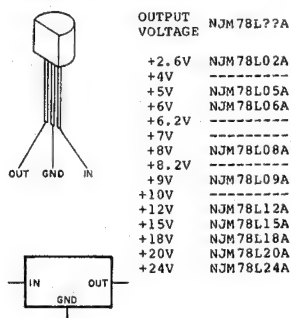
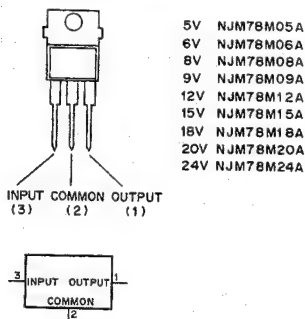


EX : EXTERNAL CLOCK IN
TRQ : INTERRUPT REQUEST IN
K0-K3 : 4-BIT PARALLEL IN
O0-O7 : 4-BIT PARALLEL OUT
P0-P3 : 4-BIT PARALLEL OUT
R0-R14 : DATA IN/OUT
RESET : RESET IN
SC/TO : SHIFT CLOCK IN / INT TIMING OUT
S1 : SERIAL DATA IN
S0 : SERIAL DATA OUT
START : STANDBY OFF IN
TC : EXTERNAL CLOCK IN FOR COUNTER
X : CLOCK OUT

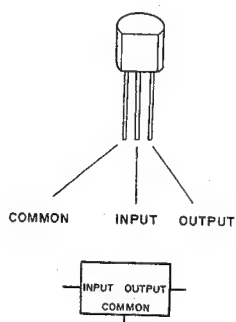


```
1 ; TTL LEVEL HIGH VOLTAGE IN
0 ; TTL LEVEL LOW VOLTAGE IN
X ; DON'T CARE (1 OR 0)
```


MN74HC4051S (MATSUSHITA)

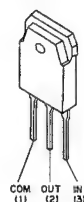
C-MOS 8-CHANNEL ANALOG MULTIPLEXER/DEMULTIPLEXER
— TOP VIEW —MN74HC4066S (MATSUSHITA)
C-MOS BILATERAL ANALOG SWITCH
— TOP VIEW —NJM2043D-D (JRC)
OPERATIONAL AMPLIFIER
— TOP VIEW —NJM2903D (JRC)
VOLTAGE COMPARATOR
— TOP VIEW —NJM4556D (JRC)
OPERATIONAL AMPLIFIER
— TOP VIEW —NJM4558D-D (JRC)
uPC4558C (NEC)
OPERATIONAL AMPLIFIER
— TOP VIEW —NJM4560DD (JRC)
OPERATIONAL AMPLIFIER
— TOP VIEW —NJM4562D-D (JRC)
OPERATIONAL AMPLIFIER
— TOP VIEW —NJM78L??A (NEC)
POSITIVE VOLTAGE REGULATOR (100mA)NJM78M??A (JRC)
POSITIVE VOLTAGE REGULATOR (500mA)
— FRONT VIEW —

NJM79L??A (JRC)
NEGATIVE VOLTAGE REGULATOR (100mA)
— FRONT VIEW —

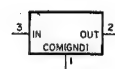


OUTPUT VOLTAGE	NJM79L??A
-3V	NJM79L03A
-4V	NJM79L03A
-5V	NJM79L05A
-6V	NJM79L05A
-7V	NJM79L05A
-8V	NJM79L08A
-9V	NJM79L09A
-10V	NJM79L08A
-12V	NJM79L12A
-15V	NJM79L15A
-18V	NJM79L18A
-20V	NJM79L18A
-24V	NJM79L24A

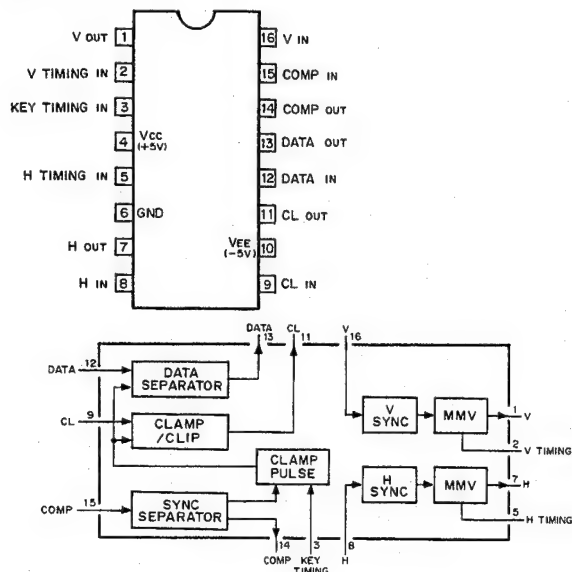
SI-3052V (SANKENI)
POSITIVE VOLTAGE REGULATOR (2A)



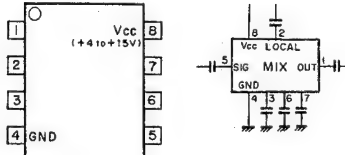
5V SI-3052V
12V SI-3122V



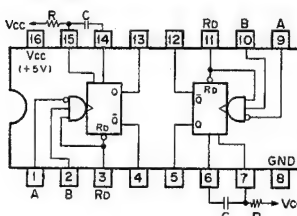
PA0009 (PIONEER)
SIGNAL SEPARATOR
— TOP VIEW —



SN16913P (TI)
BALANCED MIXER
— TOP VIEW —



SN74LS123N (TI)
TTL RETRIGGERABLE MONOSTABLE MULTIVIBRATOR WITH DIRECT RESET
— TOP VIEW —



INPUTS	OUTPUTS
Rd A B Q Q	
0 X X	0 1
X 1 X	0 1
X X 0	0 1
1 0 1	1 1
1 1 1	1 1
1 0 1	1 1

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE

OUTPUT PULSE WIDTH

$$T_w = 0.28 \left(1 + \frac{700}{R} \right) CR$$

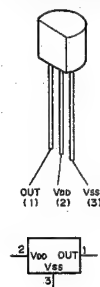
$$T_w = 0.33 \left(1 + \frac{700}{R} \right) CR$$

$$T_w = 0.25 \left(1 + \frac{700}{R} \right) CR$$

$$T_w = 0.29 \left(1 + \frac{700}{R} \right) CR$$

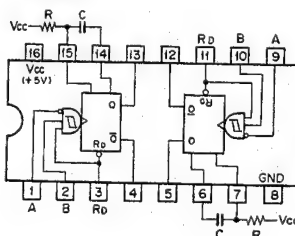
$$T_w = 0.45 CR$$

S-805?? (SEIKO I AND E)
VOLTAGE DETECTOR



DETECTION RANGE (V)	S-805??
1.00-1.10	S-8051 AN8
1.10-1.20	S-8051 ANR
2.00-2.20	S-8052 AL8
2.20-2.40	S-8052 ALR
2.40-2.60	S-8052 ALO
2.60-2.80	S-8052 ALY
2.80-3.10	S-8053 AL8
2.90-3.10	S-8053 HLB
3.10-3.40	S-8053 ALR
3.25-3.405	S-8053 ALR-U
3.80-4.20	S-8054 HN
4.00-4.30	S-8054 AL8
4.30-4.60	S-8054 ALR
4.60-4.90	S-8054 ALO
4.90-5.20	S-8054 ALY

SN74LS221N (TI)
TTL MONOSTABLE MULTIVIBRATOR WITH SCHMITT TRIGGER INPUT
— TOP VIEW —

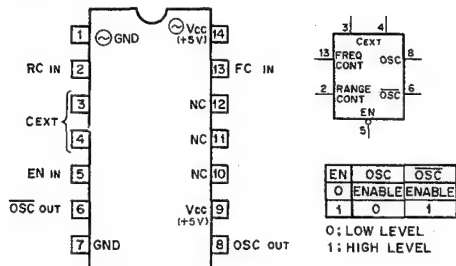


INPUTS	OUTPUTS
Rd A B Q Q	
0 X X	0 1
X 1 X	0 1
X X 0	0 1
1 0 1	1 1
1 1 1	1 1
1 0 1	1 1

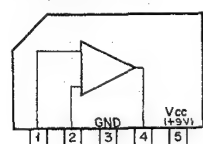
0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE

OUTPUT PULSE WIDTH = 0.7CR

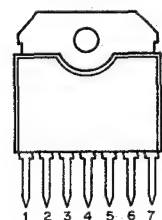
SN74LS624N (TI)
TTL VOLTAGE CONTROLLED OSCILLATOR
— TOP VIEW —



TA7060AP (TOSHIBA)
LINEAR AMP
— SIDE VIEW —

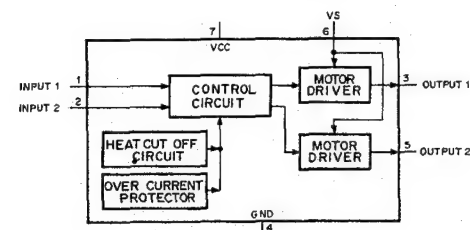


TA7267P (TOSHIBA)
DC MOTOR DRIVER
— PRINTED SIDE VIEW —

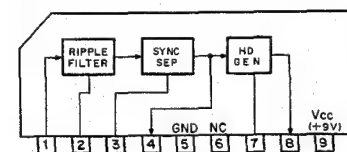


INPUTS		OUTPUTS		MODE
1	2	1	2	
1	1	0	0	BRAKE
0	1	0	1	ROTATION/ REV. ROTATION
1	0	1	0	REV. ROTATION/ ROTATION
0	0	HI-Z		STOP

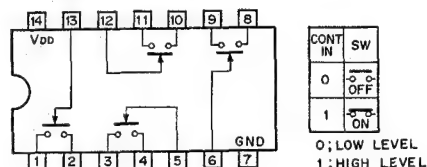
0: LOW LEVEL
1: HIGH LEVEL
HI-Z: HIGH IMPEDANCE



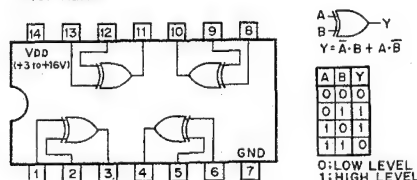
TA7357AP (TOSHIBA)
SYNC SEPARATOR/HD PULSE GENERATOR
— SIDE VIEW —



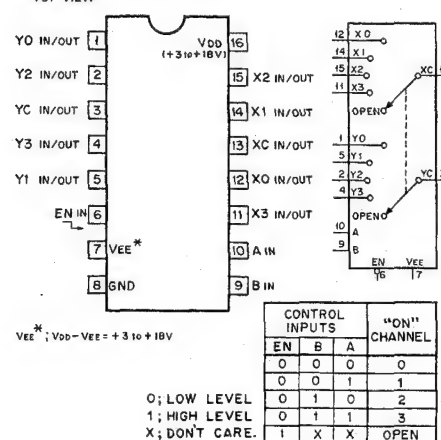
TC4016BP (TOSHIBA)
C-MOS BILATERAL SWITCH
— TOP VIEW —



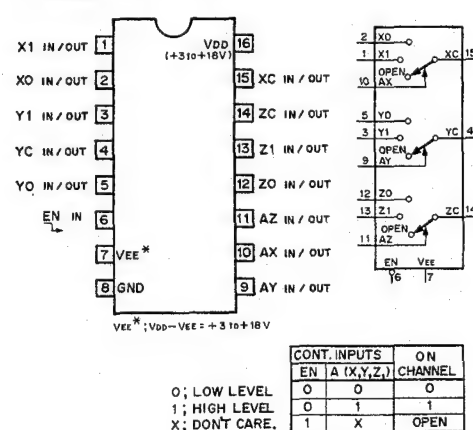
TC4030BP (TOSHIBA)
C-MOS EXCLUSIVE OR GATE
— TOP VIEW —



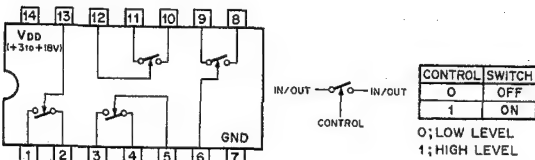
TC4052BPHB (TOSHIBA)
C-MOS 4-CHANNEL MULTIPLEXER/DEMULTIPLEXER
— TOP VIEW —



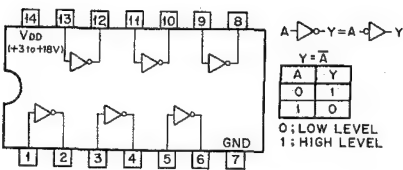
TC4053BP (TOSHIBA)
C-MOS 2-CHANNEL MULTIPLEXER/DEMULTIPLEXER
— TOP VIEW —



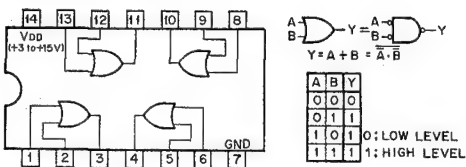
TC4068BP (TOSHIBA)
C-MOS BILATERAL ANALOG SWITCH
— TOP VIEW —



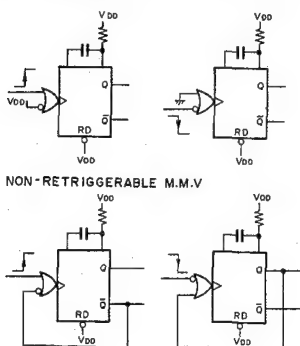
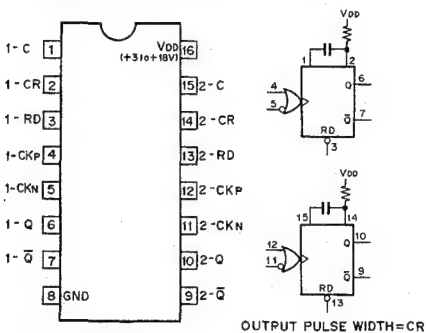
TC4069UBP (TOSHIBA)
C-MOS INVERTER
— TOP VIEW —



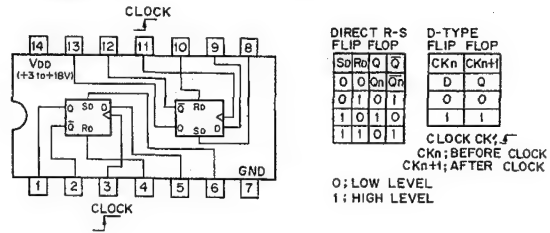
TC4071BP (TOSHIBA)
C-MOS 2-INPUT OR GATE
— TOP VIEW —



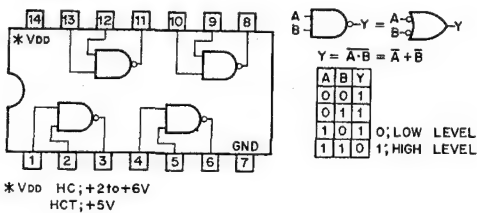
TC4538BF (TOSHIBA) FLAT PACKAGE
TC4538BP (TOSHIBA)
C-MOS DUAL RETRIGGERABLE/NON-RETRIGGERABLE
MONOSTABLE MULTIVIBRATOR
— TOP VIEW —



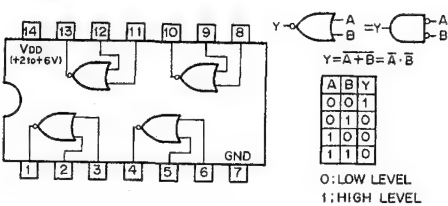
TC504013BP (TOSHIBA)
C-MOS D-TYPE FLIP FLOP WITH DIRECT SET/RESET
— TOP VIEW —



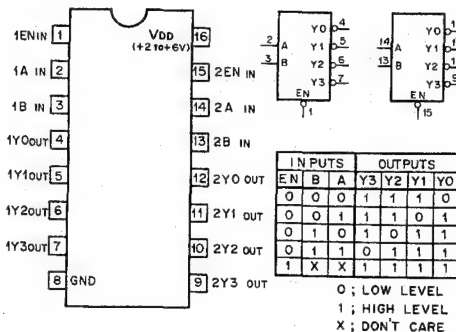
TC74HC00F (TOSHIBA) FLAT PACKAGE
TC74HC00P (TOSHIBA)
C-MOS 2-INPUT NAND GATE
— TOP VIEW —



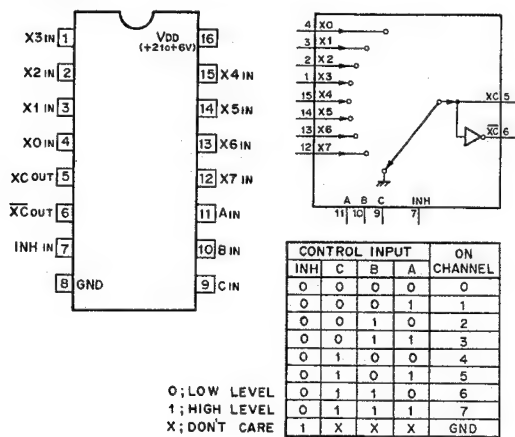
TC74HC02P (TOSHIBA)
C-MOS 2-INPUT POSITIVE-NOR GATE
— TOP VIEW —



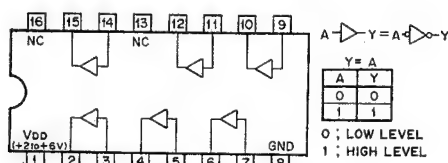
TC74HC139P (TOSHIBA)
C-MOS 1-OF-4 DECODER/DEMULTIPLEXER
— TOP VIEW —



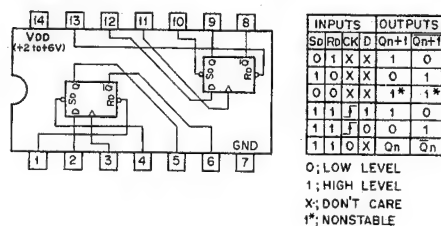
TC74HC151P (TOSHIBA)
C-MOS 8-LINE-TO-1-LINE DATA SELECTOR/MULTIPLEXER
— TOP VIEW —



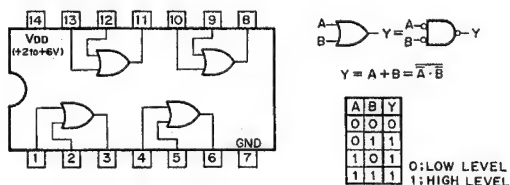
TC74HC4050P (TOSHIBA)
C-MOS NON-INVERTING TYPE BUFFER/CONVERTER
— TOP VIEW —



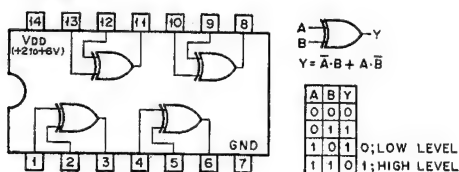
TC74HC74P (TOSHIBA)
C-MOS D-TYPE FLIP FLOP WITH DIRECT SET/RESET
— TOP VIEW —



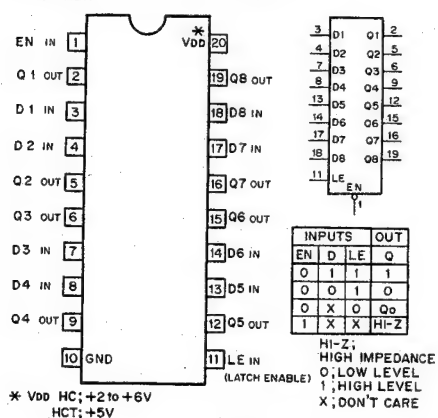
TC74HC32P (TOSHIBA)
C-MOS 2-INPUT OR GATE
— TOP VIEW —



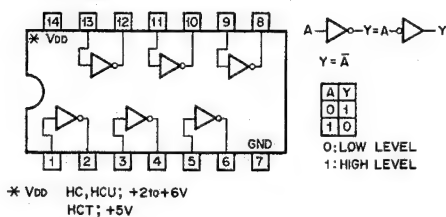
TC74HC86P (TOSHIBA)
C-MOS EXCLUSIVE OR GATE
— TOP VIEW —



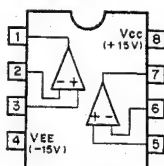
TC74HC373P (TOSHIBA)
C-MOS 3-STATE OUTPUTS OCTAL LATCHES
— TOP VIEW —



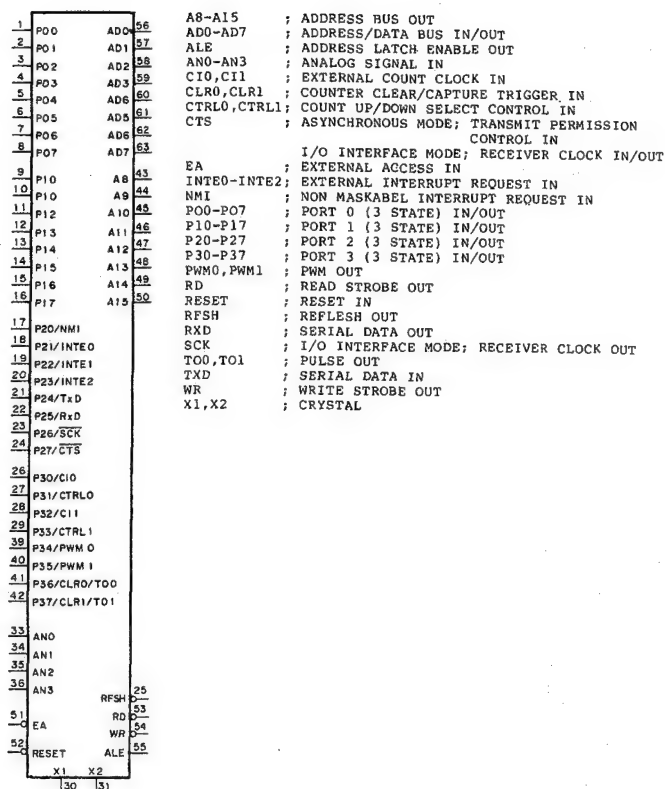
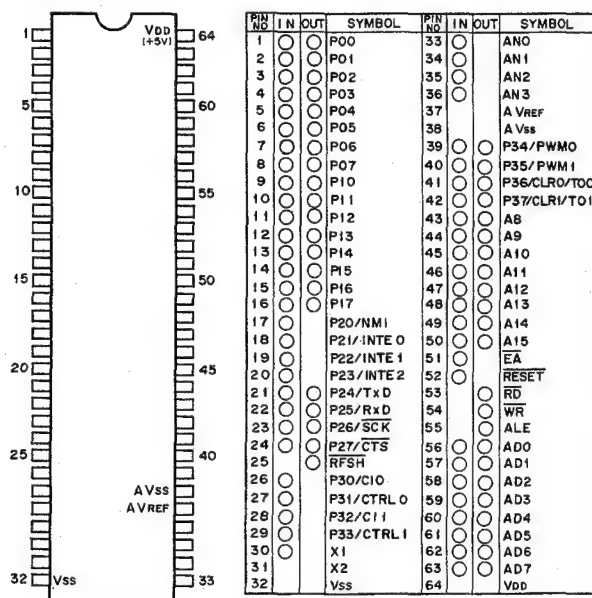
TC74HC004P (TOSHIBA)
C-MOS INVERTER
— TOP VIEW —



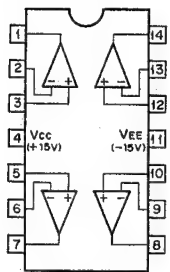
TL082CP (TI)
OPERATIONAL AMPLIFIER
(J FET-INPUT)
— TOP VIEW —



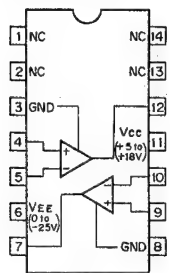
uPD78310CW (NEC)
C MOS 16/8 BIT ONE CHIP MICROCOMPUTER
— TOP VIEW —



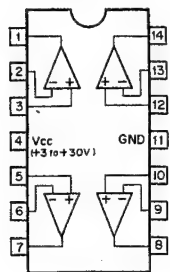
TL084CN (TI)
OPERATIONAL AMPLIFIER
(J FET-INPUT)
— TOP VIEW —



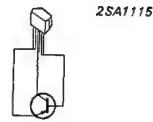
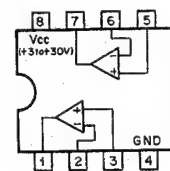
uPC319C (NEC)
DUAL VOLTAGE COMPARATOR
— TOP VIEW —



uPC324C (NEC)
QUAD. OP. AMPLIFIER
— TOP VIEW —

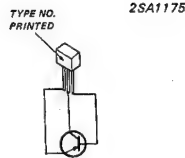
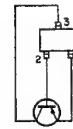


uPC358C (NEC)
DUAL OPERATIONAL AMPLIFIERS
— TOP VIEW —

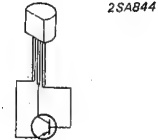


2SA1115

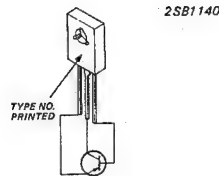
TOP VIEW (SCALE 4/1) 2SA1162
2SA1226



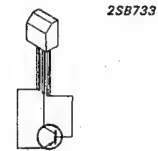
2SA1175



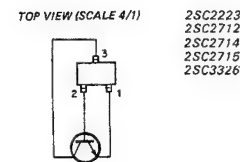
2SA844



2SB1140

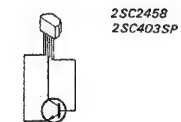


2SB733

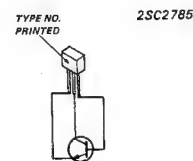


TOP VIEW (SCALE 4/1)

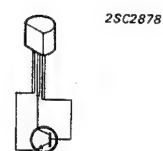
2SC2223
2SC2712
2SC2714
2SC2715
2SC3326



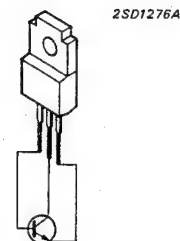
2SC2458
2SC403SP



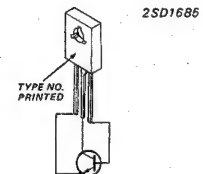
2SC2785



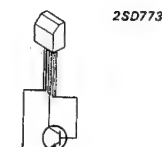
2SC2878



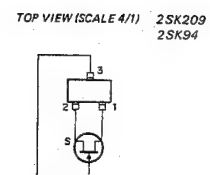
2SD1276A



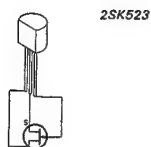
2SD1685



2SD773

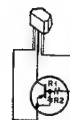
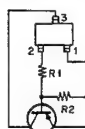


TOP VIEW (SCALE 4/1) 2SK209
2SK94



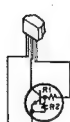
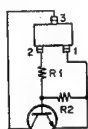
2SK523

TOP VIEW (SCALE 4/1) DTA114EK (R1=10K, R2=10K)



DTA124ES (R1=22K, R2=22K)
DTA144ES (R1=47K, R2=47K)

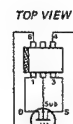
TOP VIEW (SCALE 4/1) DTC144EK (R1=47K, R2=47K)



DTC124ES (R1=22K, R2=22K)
DTC144ES (R1=47K, R2=47K)



PH110

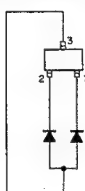


TX429M

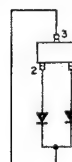


10E-2
1SS119

TOP VIEW (SCALE 4/1) 1S2835



TOP VIEW (SCALE 4/1) 1S2837



TOP VIEW (SCALE 4/1) 1SS123



1SS99



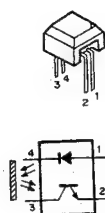
1733



EBR3402S ; RED

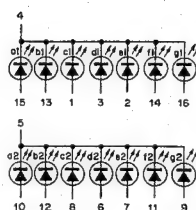
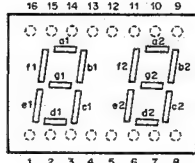


GL-5HD5 : RED
GL-5HS42 : AMBER

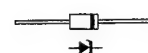


GP2S05

DUAL 7-SEGMENT LED
— TOP VIEW —

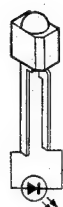


LB402VK (ROHM)



RD ? ? EB ?
RD ? ? EI ?
RD ? ? ESB ?
RD ? ? ESL ?

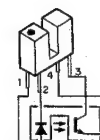
TOP VIEW (SCALE 4/1) RD ? ? 7M



SE310 ; INFRARED



TLG255 ; GREEN



TLP801A

SECTION 15
SCHEMATIC DIAGRAMS

The circuit information is provided below.

SYSTEM	BOARD	CIRCUIT FUNCTION
VIDEO	DM-74	Video Demodulator
	EN-66A	Video Encoder
	CP-123	Video Output Amplifier
AUDIO	AU-101A	Audio PB Amplifier
	HP-38	Headphones Volume/Jack
SERVO	SV-99	Drum/Capstan/Reel Servo
	SV-117A	Picture Splitting Compensator
	SVD-2	Drum/Capstan Motor Driver
	DE-15	Reel FG
	DUS-174	Reel Motor Driver
	DUS-175	Reel Motor Driver
	TR-18	Tape Tension Sensor
	VR-69	Tracking Control Volume
SYSTEM CONTROL	KY-130	Function Key/Display
	DP-87	Time Counter Display
	SW-274	Dolby NR/Superimpose Switch
	LED-58	Auto Off Display
	SY-121A	System Control
	CCM-2	Cassette-up Compartment Motor
	CL-14	Cassette-up Compartment
	PC-47	Cassette-up Compartment (L/S Detector)
	PC-33	Cassette-up Compartment (Cassette Up/Down Detector)
	PC-41	Cassette-up Compartment (Cassette IN Detector)
	PD-35	Pinch Solenoid
	PTC-15	Thread/ Unthread End Sensor
	PTC-20	Cassette Detector (Tape Thickness, Reel Hub Diameter, Metal/Oxide)
	PTC-21	Reel Table Position Detector
	PTC-31	Threading Motor FG Detector
	PTC-36	Cassette Detector (Tape Thickness, Reel Hub Diameter, Metal/Oxide)
	RM-40	Relay Board for Reel Motor & Brake Solenoid
TIME CODE	TC-49A	Time Code Reader
POWER	UR-14E	Switching Regulator
	AC-93A	AC Input
	DC-36	DC Supply

回路図内において、REF. NO の近傍に下記記号が記載されていますが、これは生産時の部品データです。

In the schematic diagrams, the following marks are described nearby reference number.
These are parts data at factory.

CAPACITOR (C)

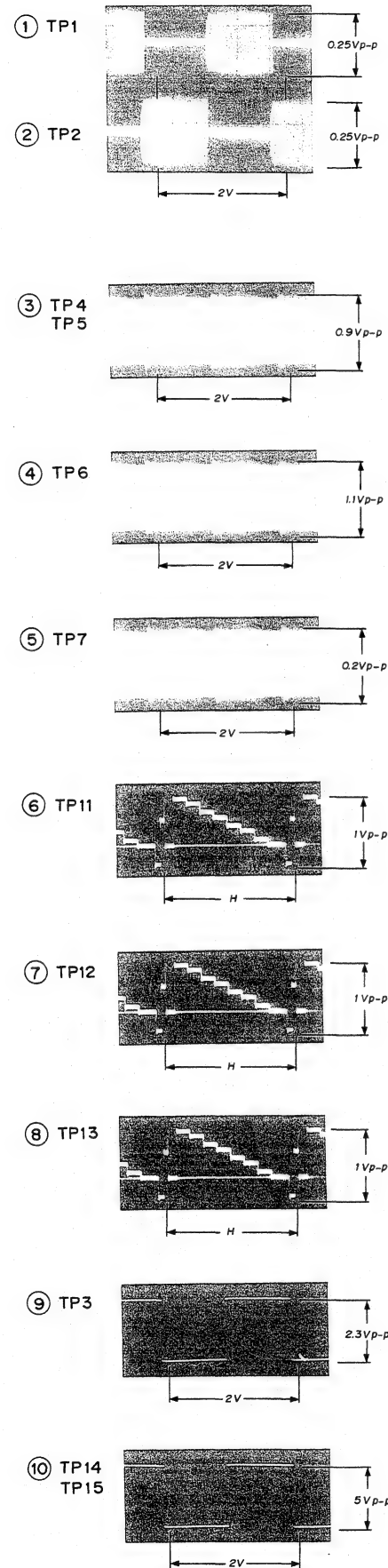
RESISTOR (R)

VARIABLE RESISTOR (RV)

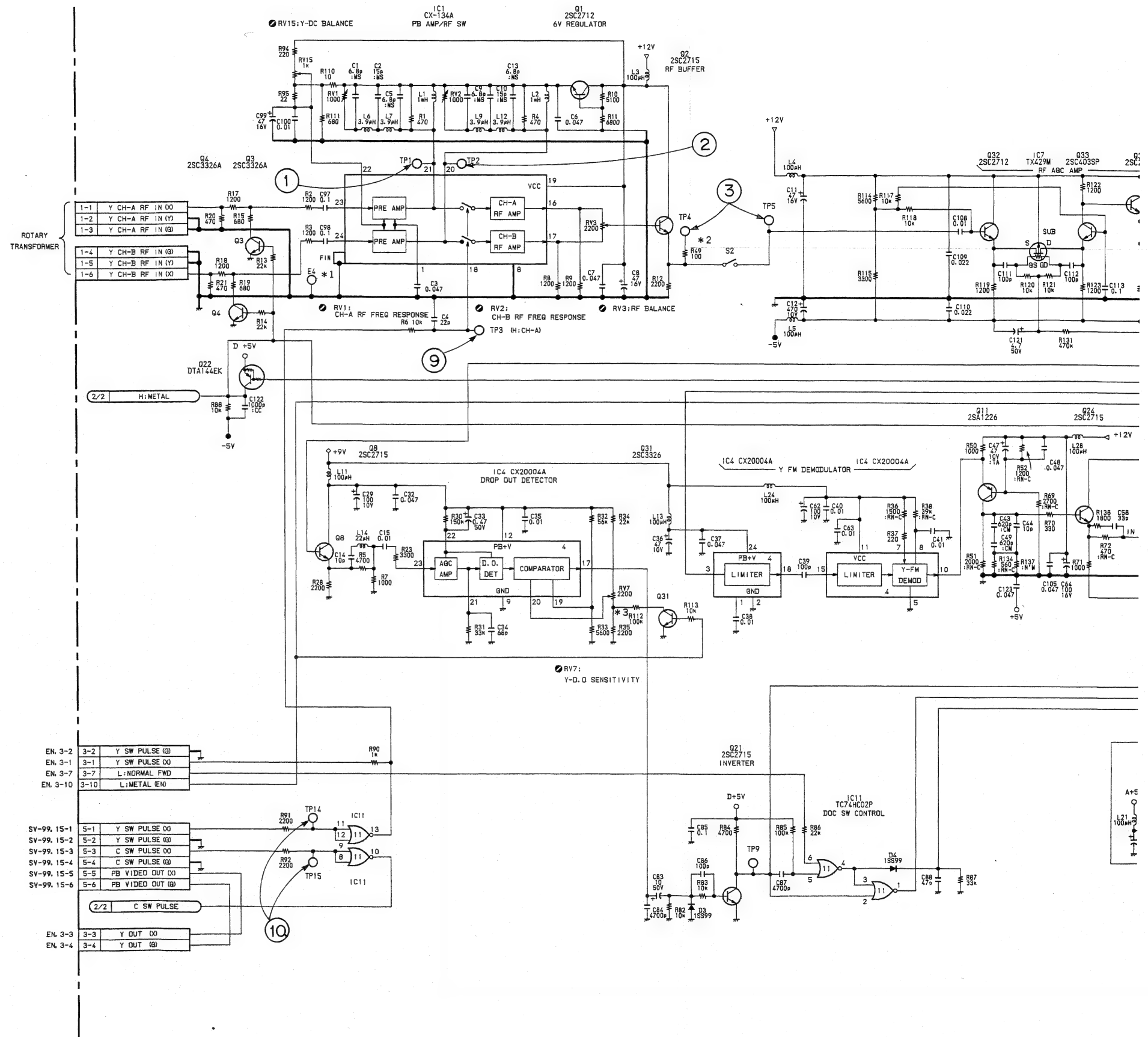
AL	}	ELECTROLYTIC
AS		
TA	}	TANTALUM
CA	}	CERAMIC
CC		
CCS		
CM		
CS	}	MYLAR
MPS		
PP		
PS		
PT	}	DIPPED MICA
MD		
MS		
	}	MICA

RC	}	CARBON
RD		
RF	}	FUSE
RN	}	METAL
RS		
RW	}	WIREWOUND

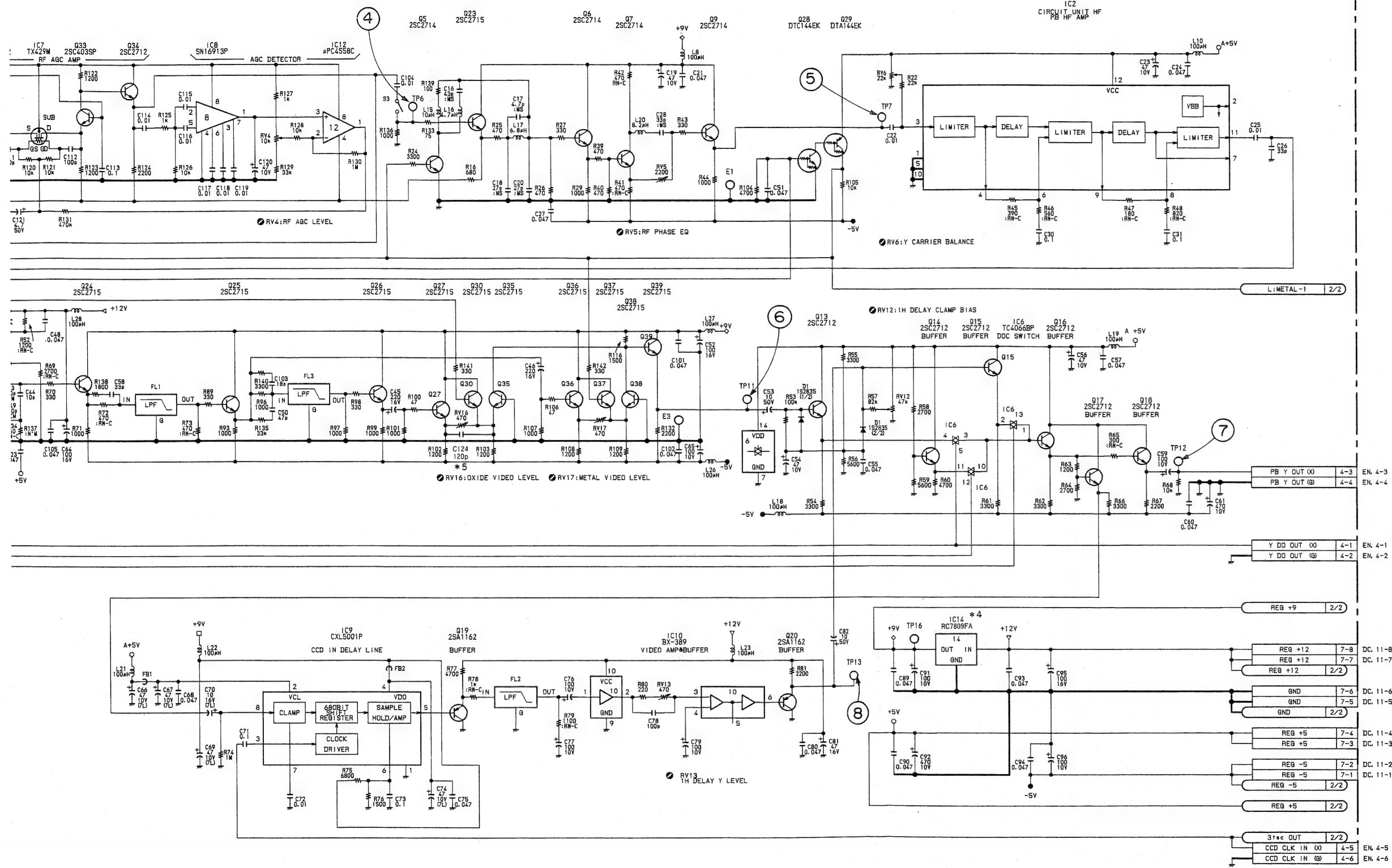
DM-74(1/2); VIDEO DEMODULATOR



15-5



15-6

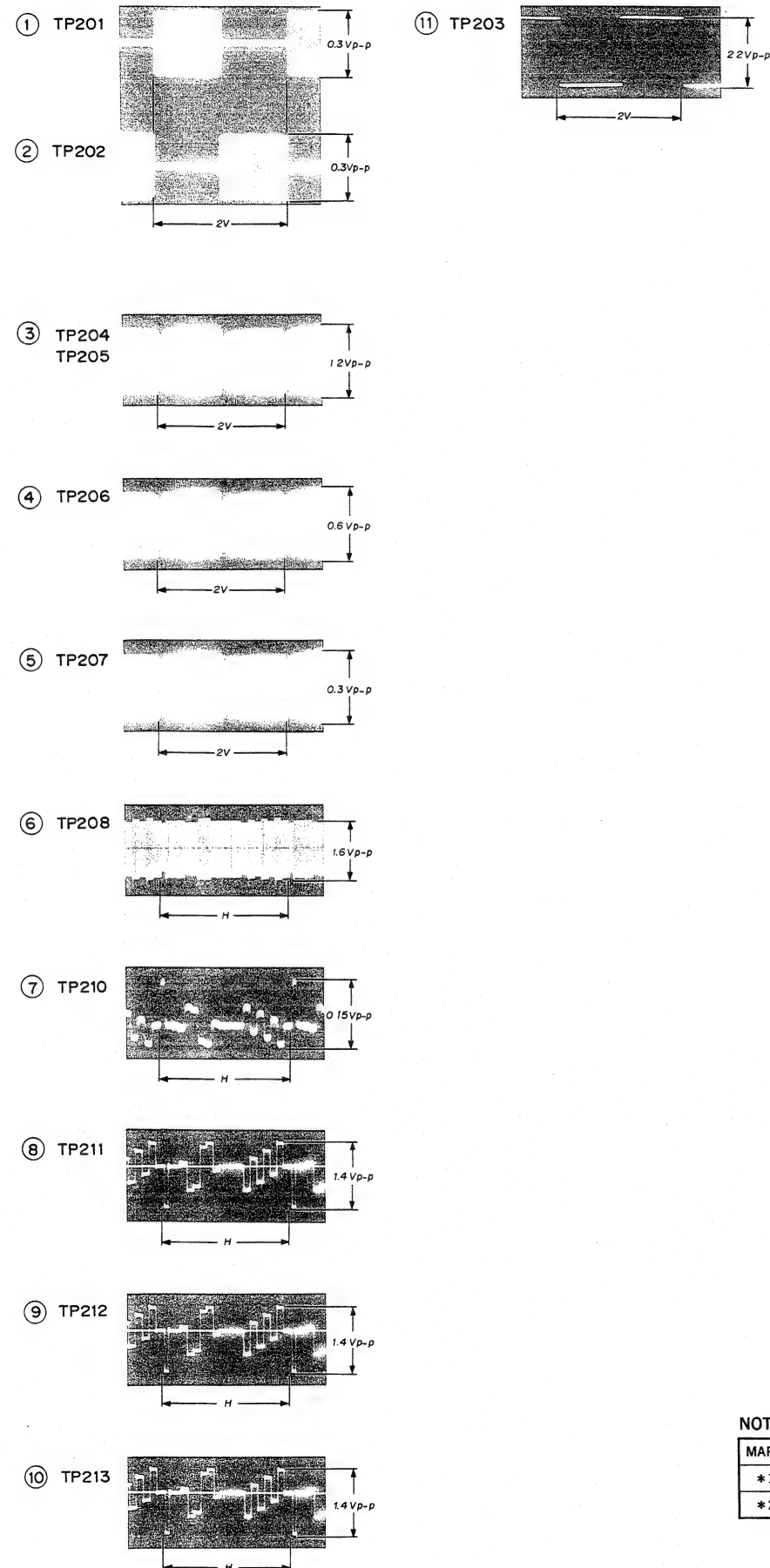


NOTE:

MARK	ADDRESS	CHANGE INFORMATION	SERIAL No.
*1	2-E	E4 ADDED	EK: 10189-
*2	2-G	R49 ADDED	
*3	4-F	R112 CHANGED 33K→100K	
*4	4-M	IC14 CHANGED NJM78M09A ↓ RC7809FA	EK: 11058-
*5	3-J	C124 ADDED	EK: 11466-

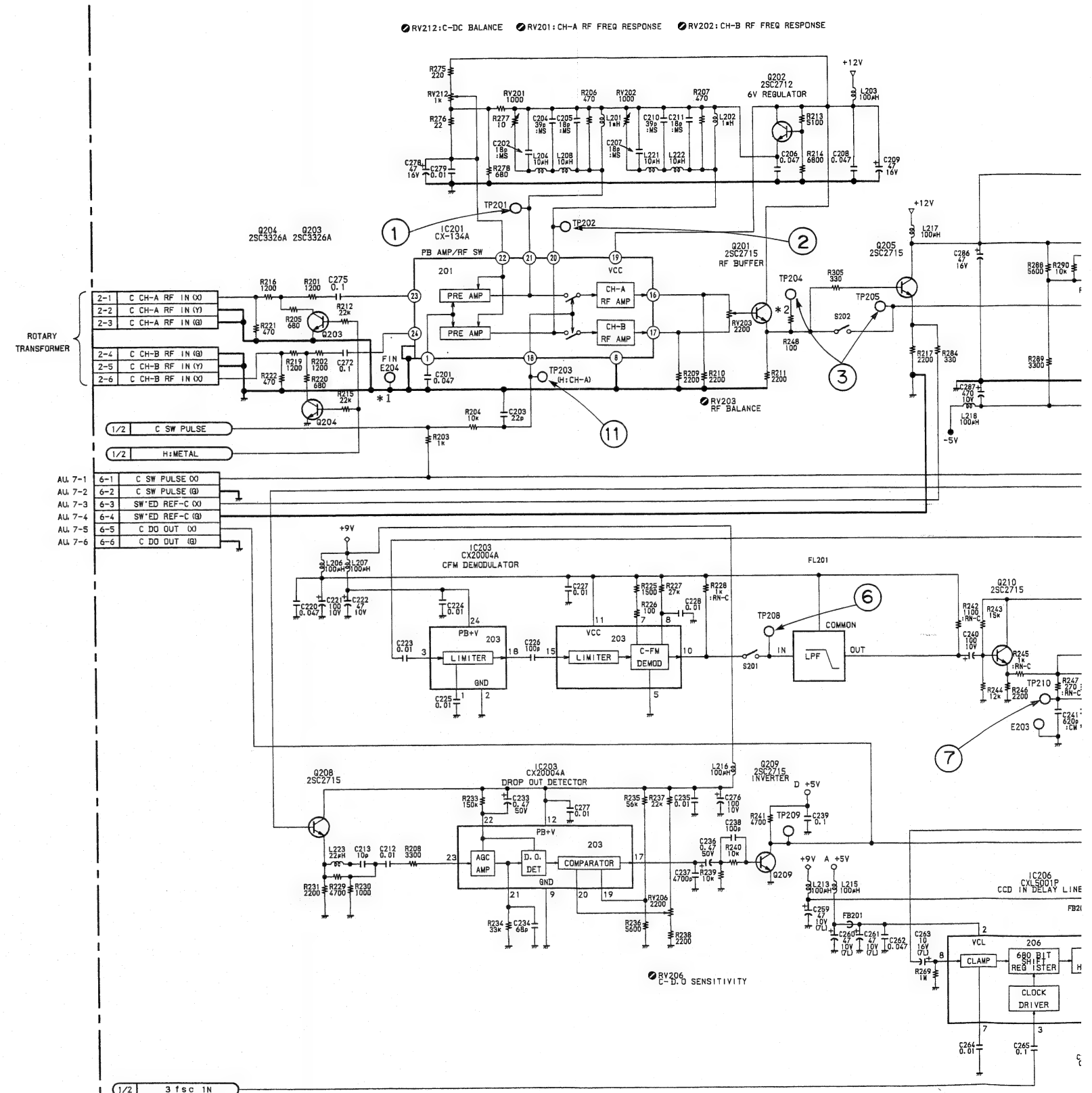
DM-74(1/2)
I-627-659-12, 13(4)
BVW-22P

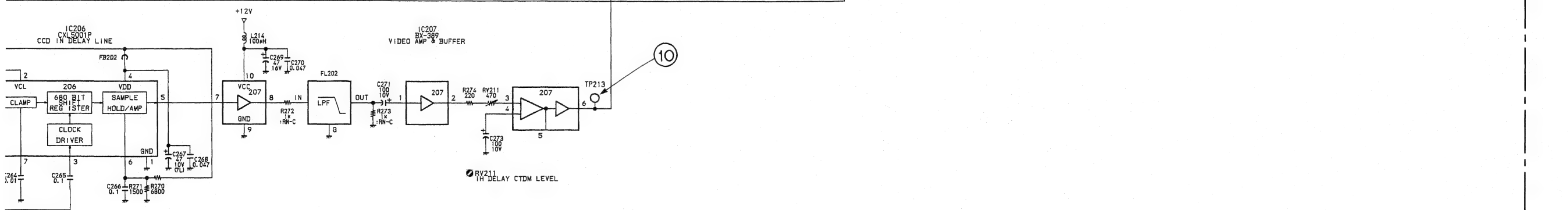
DM-74(2/2); VIDEO DEMODULATOR



NOTE:

MARK	CHANGE INFORMATION	SERIAL No.
*1	E204 ADDED	EK: 10189-
*2	R248 ADDED	





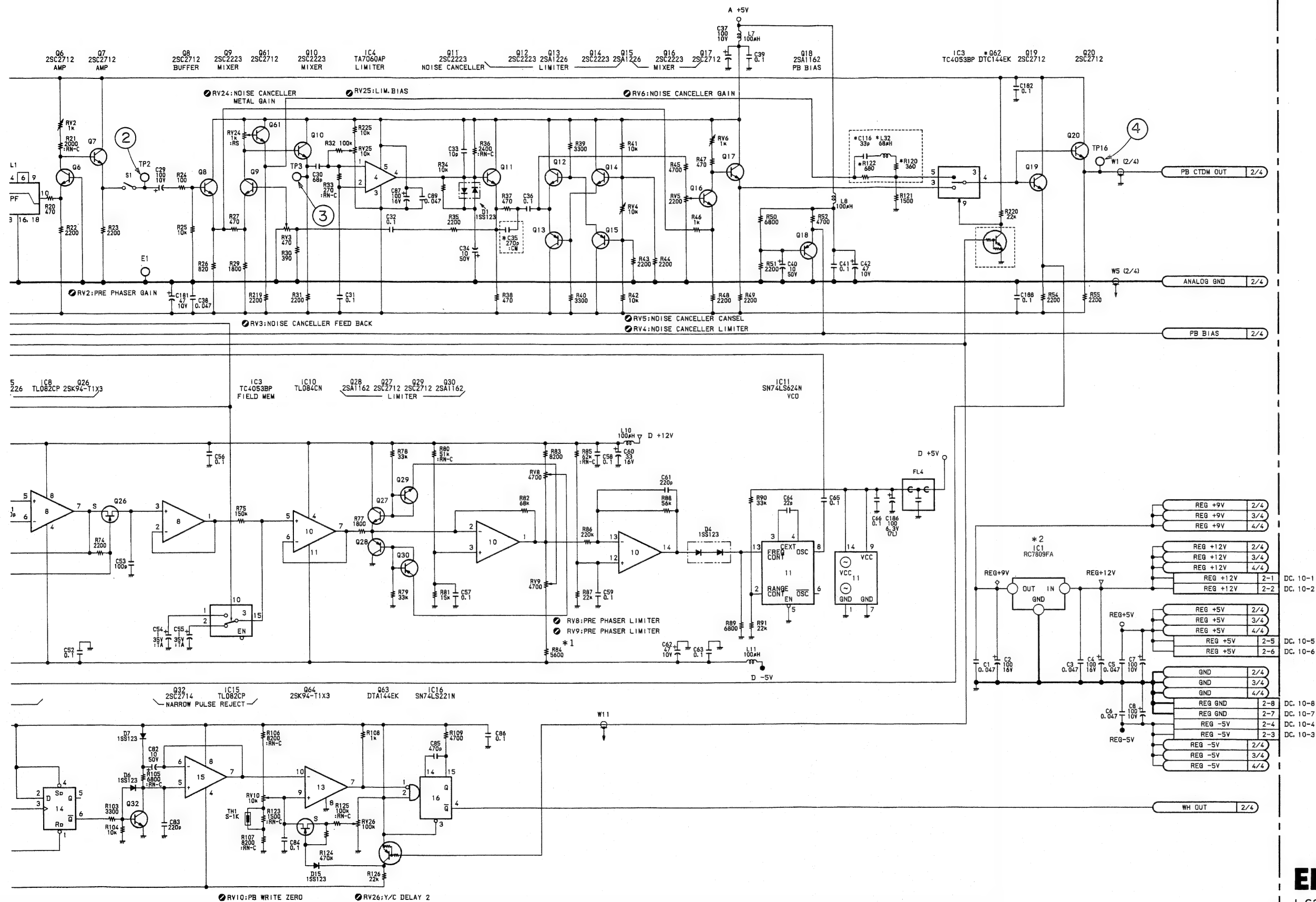
DM-74(²/₂)

1



MARK	CHANGE INFORMATION	SERIAL No.
*1	R84 CHANGED 6800→5600	J; 10091- UC;10204- EK; 10189-
*2	IC1 CHANGED NJM78M09A ↓ RC7809FA	EK;11058-





#	NTSC	PAL
C26	75P:CM	47P:CM
R15	1K	470

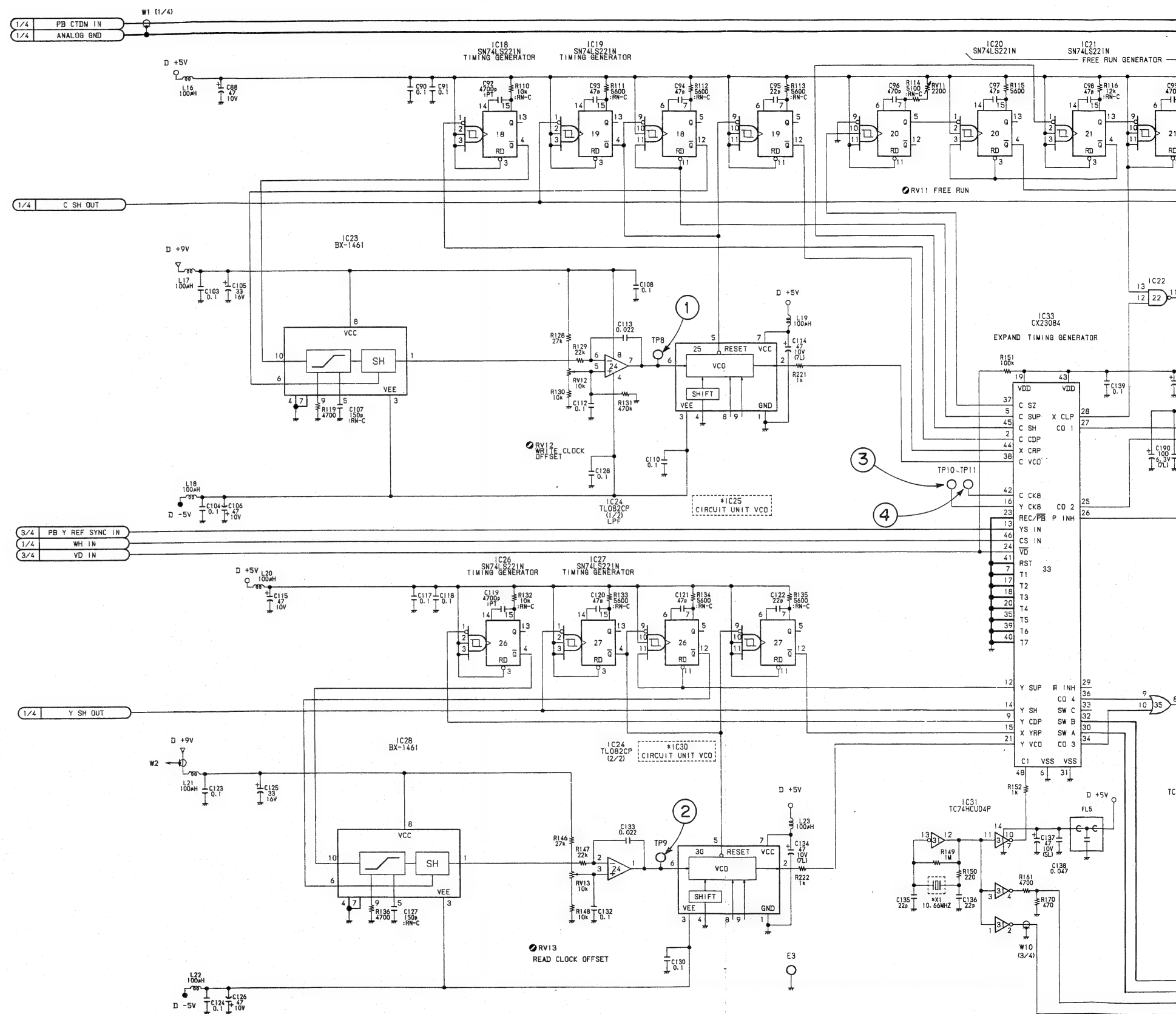
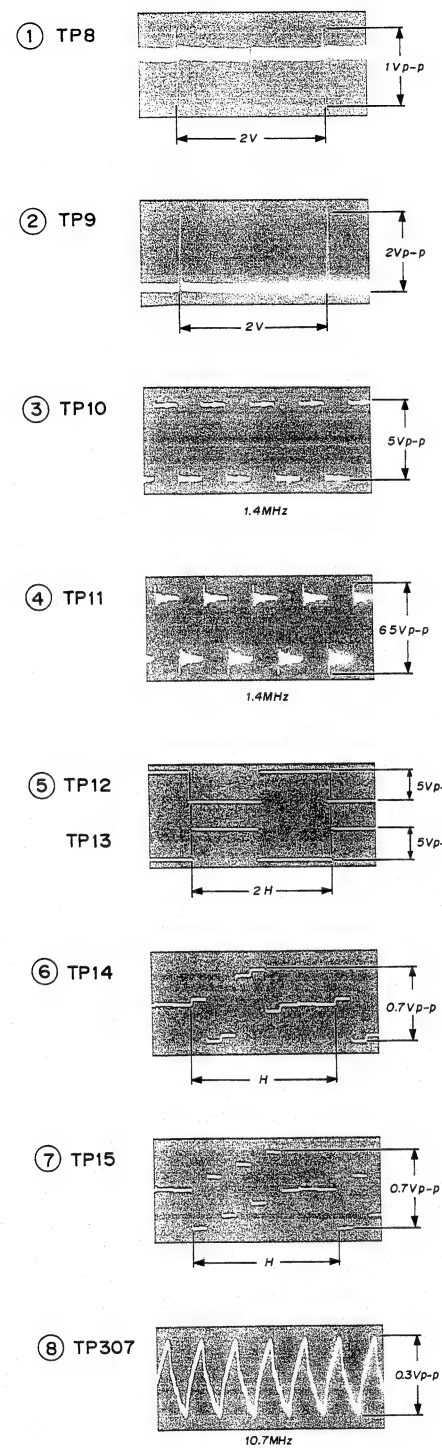
#	NTSC	PAL
C35	150P:CM	270P:CM

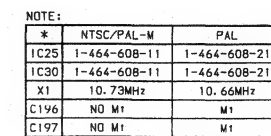
#	NTSC	PAL
C116	M1	NO M1
L32	M1	NO M1
R120	M1	NO M1
R122	M1	NO M1
G62	M1	NO M1

EN-66/A(1/4)

I-626-318-13, 14, 15(3)
BVW-22
BVW-22P

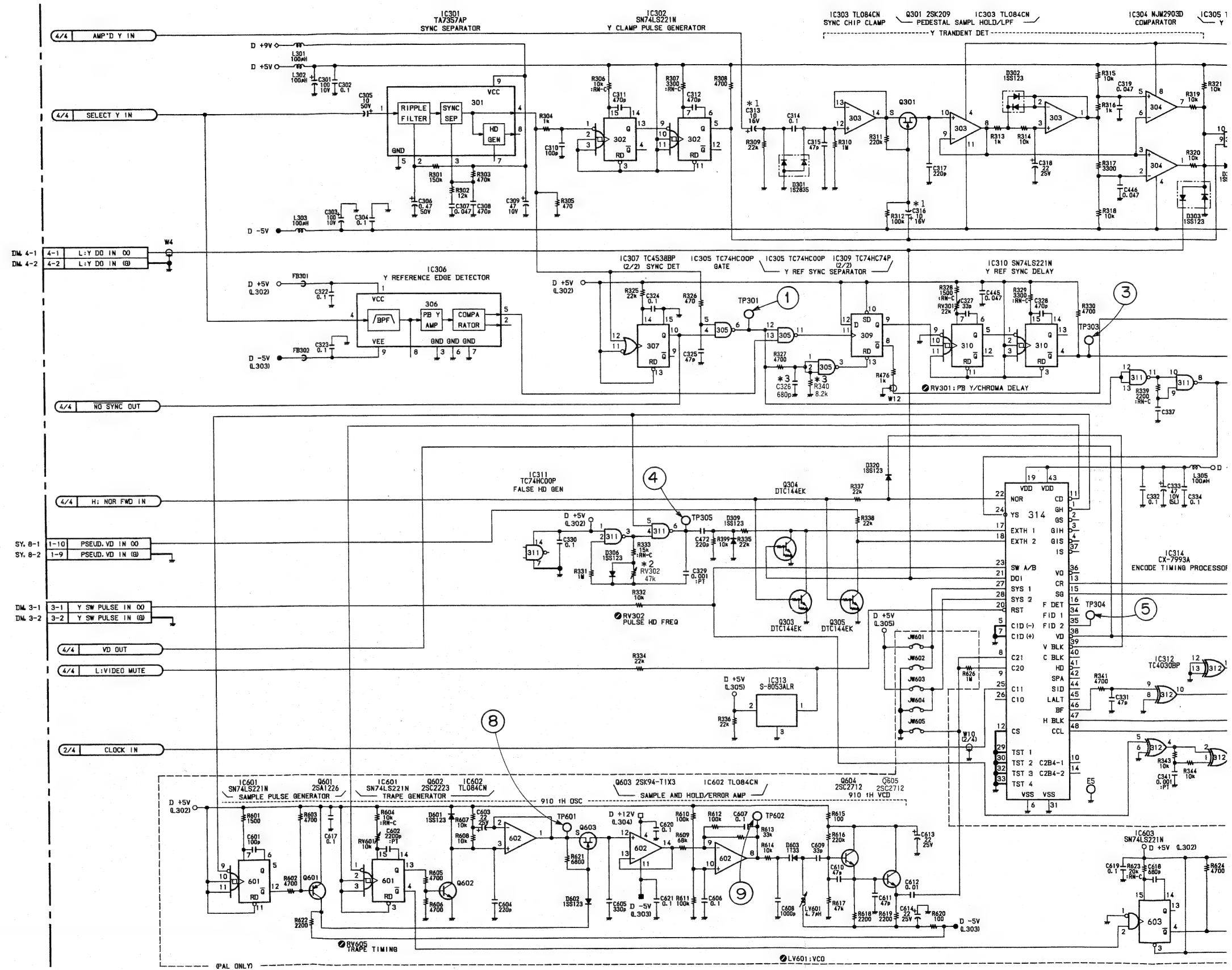
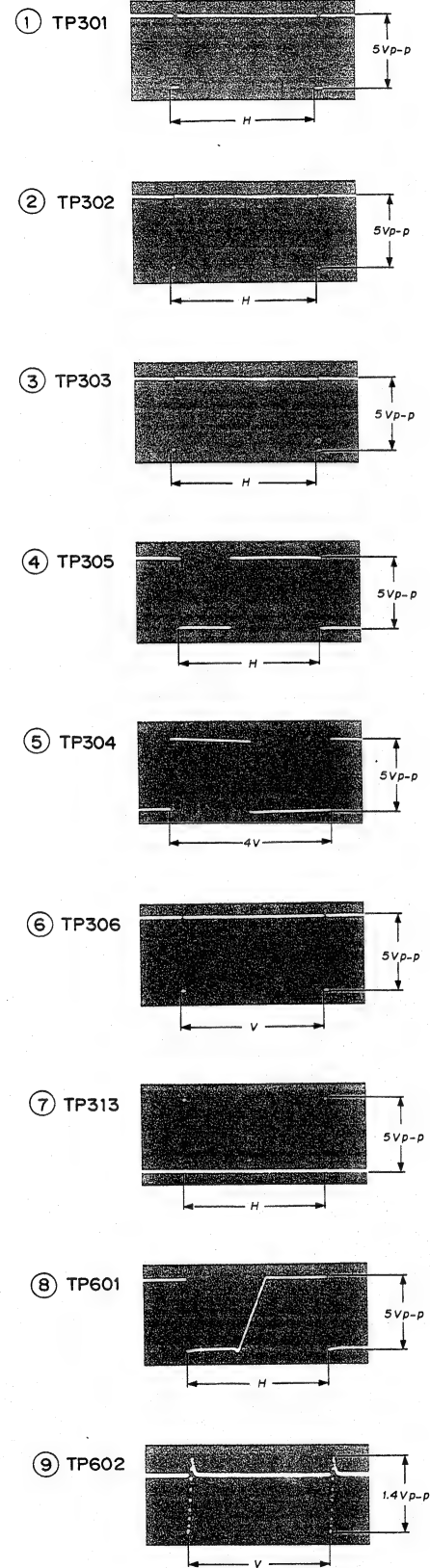
EN-66A(2/4); VIDEO ENCODER

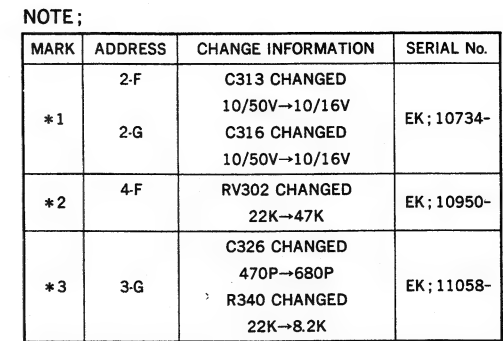




1-626-318-13, 14, 15(1)
BVW-22
BVW-22P

EN-66A(3/4); VIDEO ENCODER





Y CLAMP OUT 1 4/4

Pinout diagram for the 74VHC04:

- Pin 1: D REG +12V (1/4)
- Pin 2: D REG +5V (1/4)
- Pin 3: D REG -5V (1/4)
- Pin 4: GND (1/4)
- Pin 5: GATED VD IN (4/4)

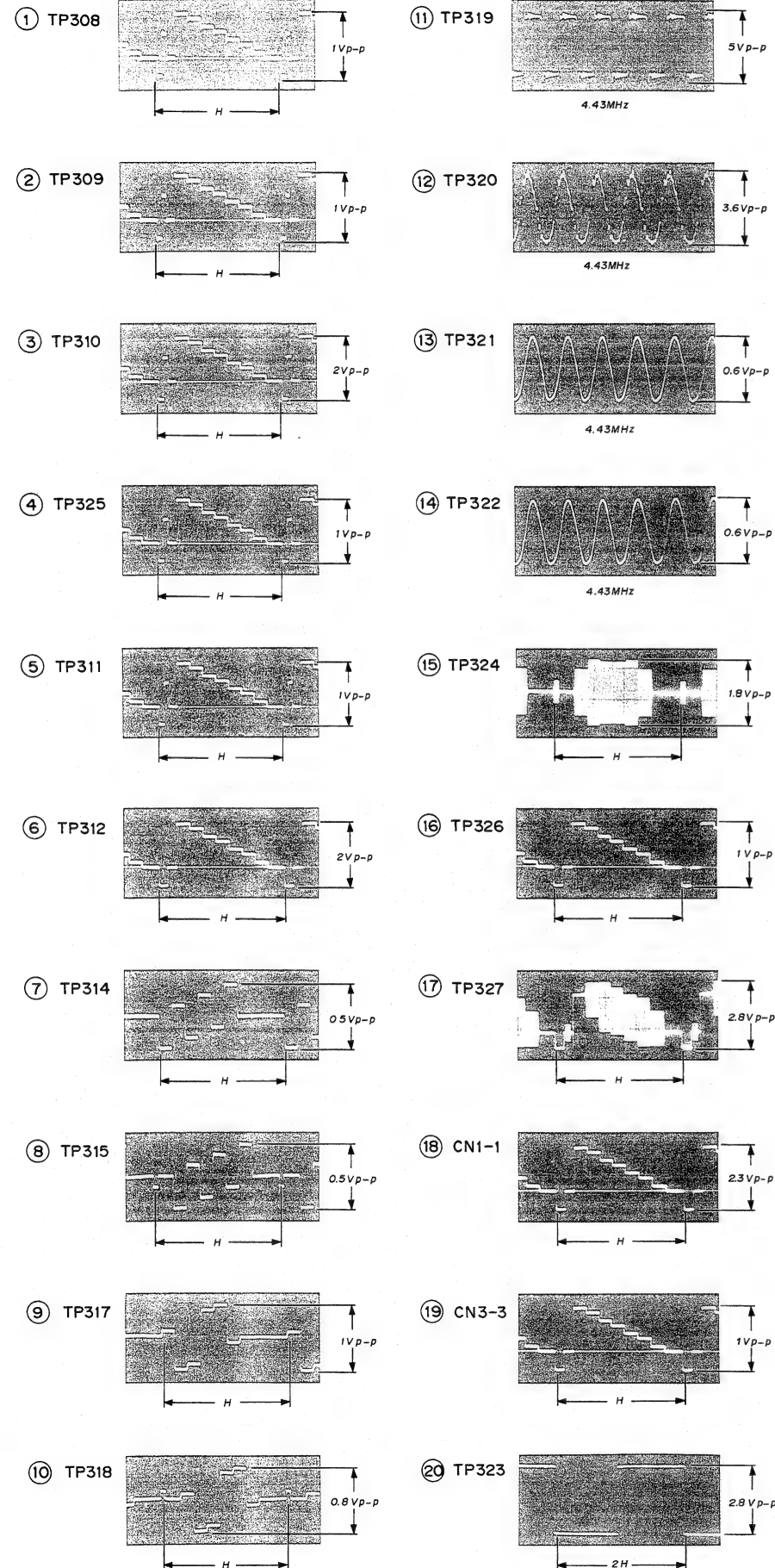
CR OUT	4/4
SG OUT	4/4
VD OUT	2/4
BF OUT	4/4
H BLK OUT	4/4
CCL OUT	4/4

	NTSC	PAL
JW601	M*1	NO M*1
JW602	NO M*1	M*1
JW603	M*1	M*1
JW604	NO M*1	NO M*1
JW605	M*1	NO M*1
R624	M*1	M*1
R625	NO M*1	M*1

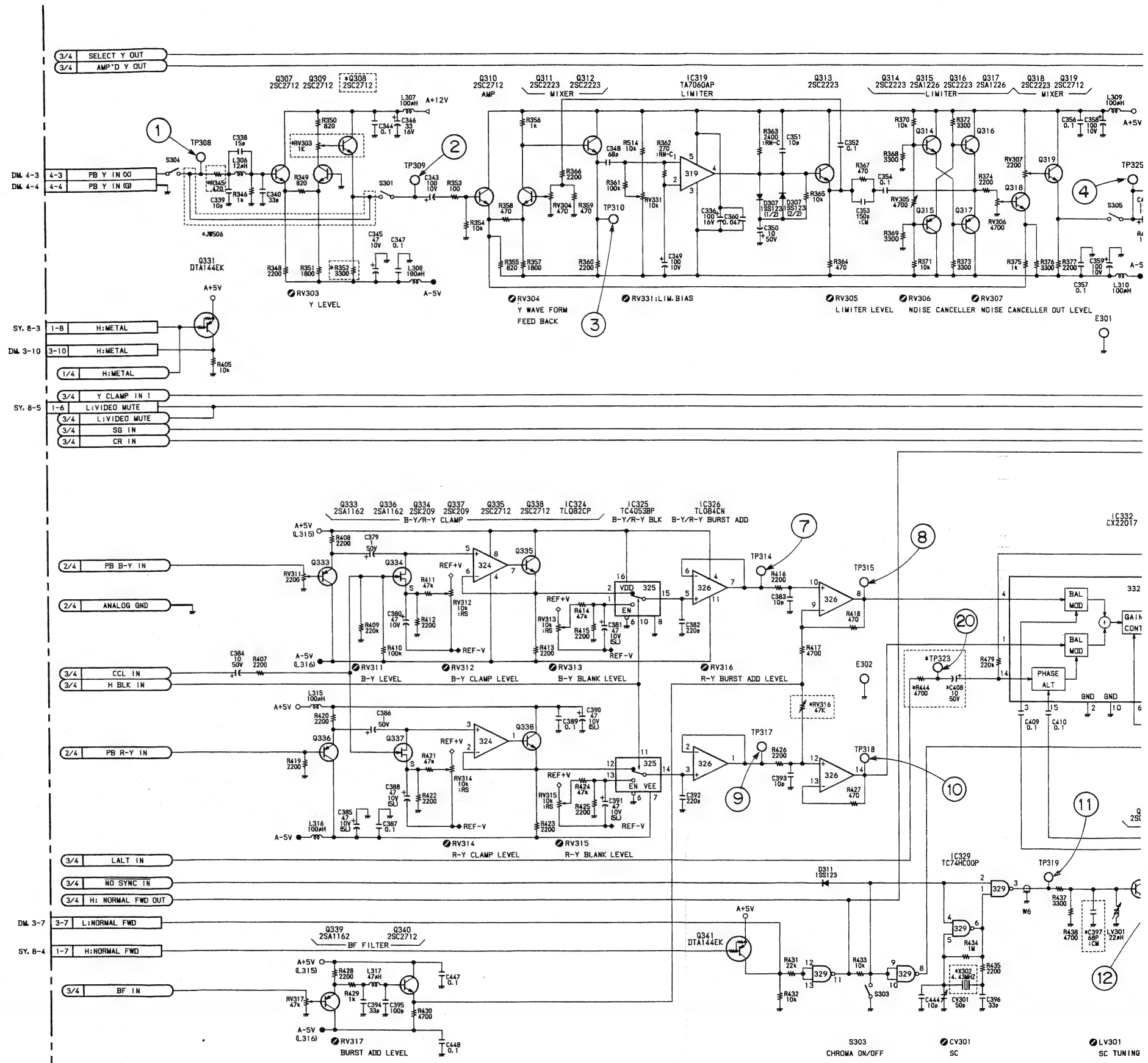
EN-66/A(³/₄)

1-626-318-13, 14, 15(3)
BVW-22
BVW-22P

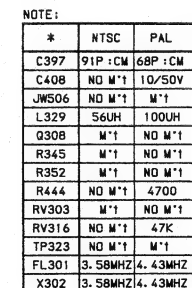
EN-66A(4/4); VIDEO ENCODER



15-43

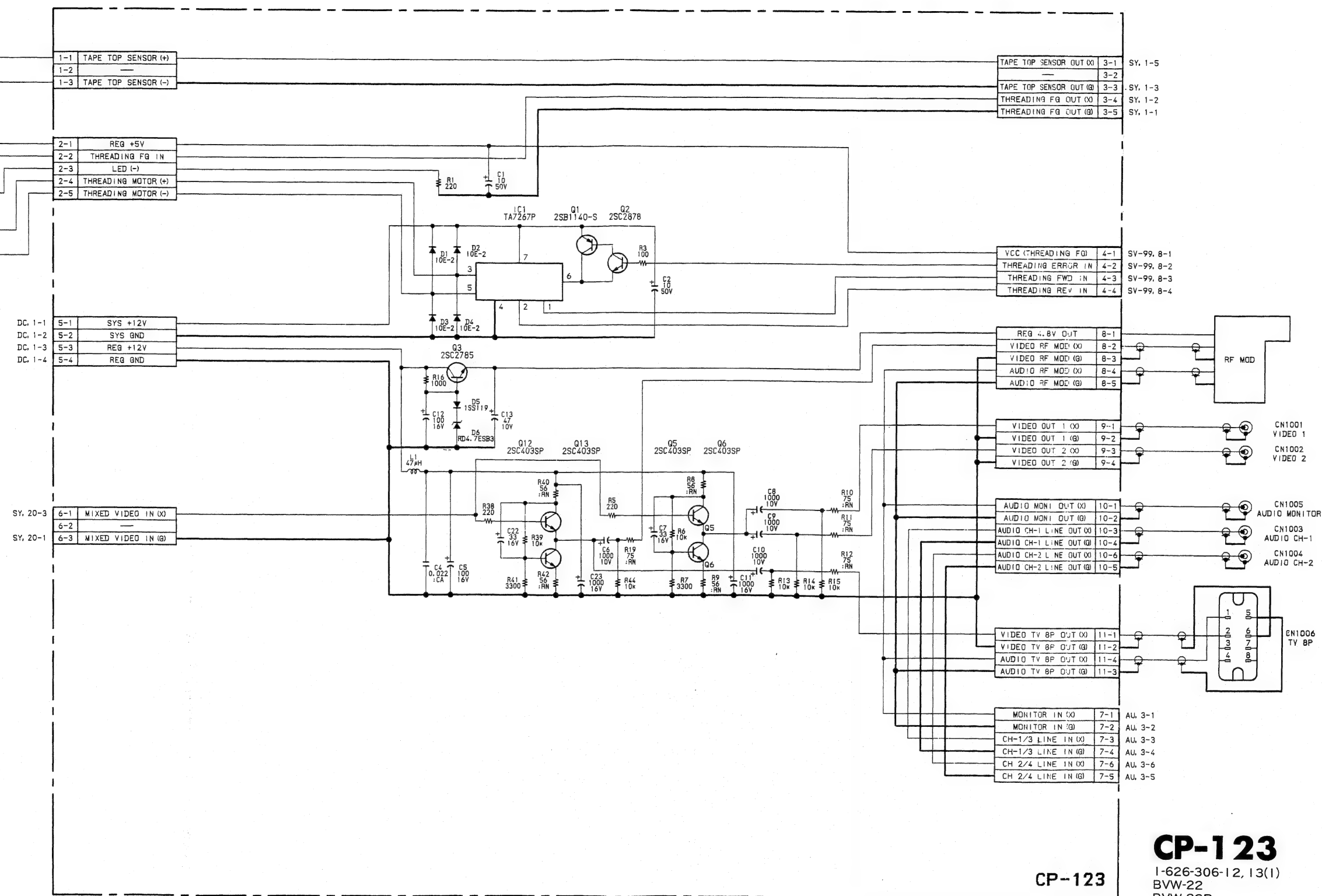


15-44



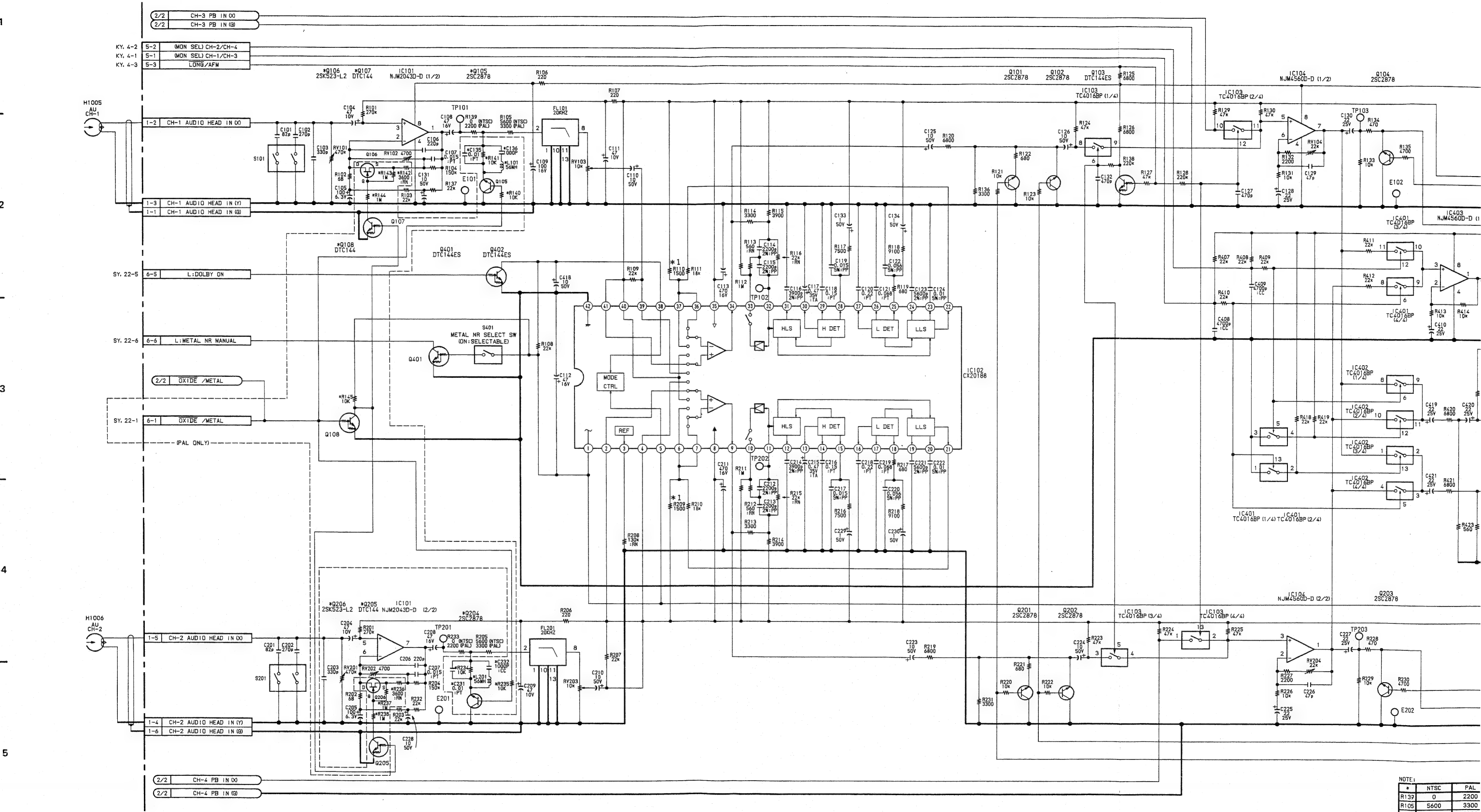
EN-66/A(4/4)
I-626-318-13, 14, 15(2)
BVW-22
BVW-22P

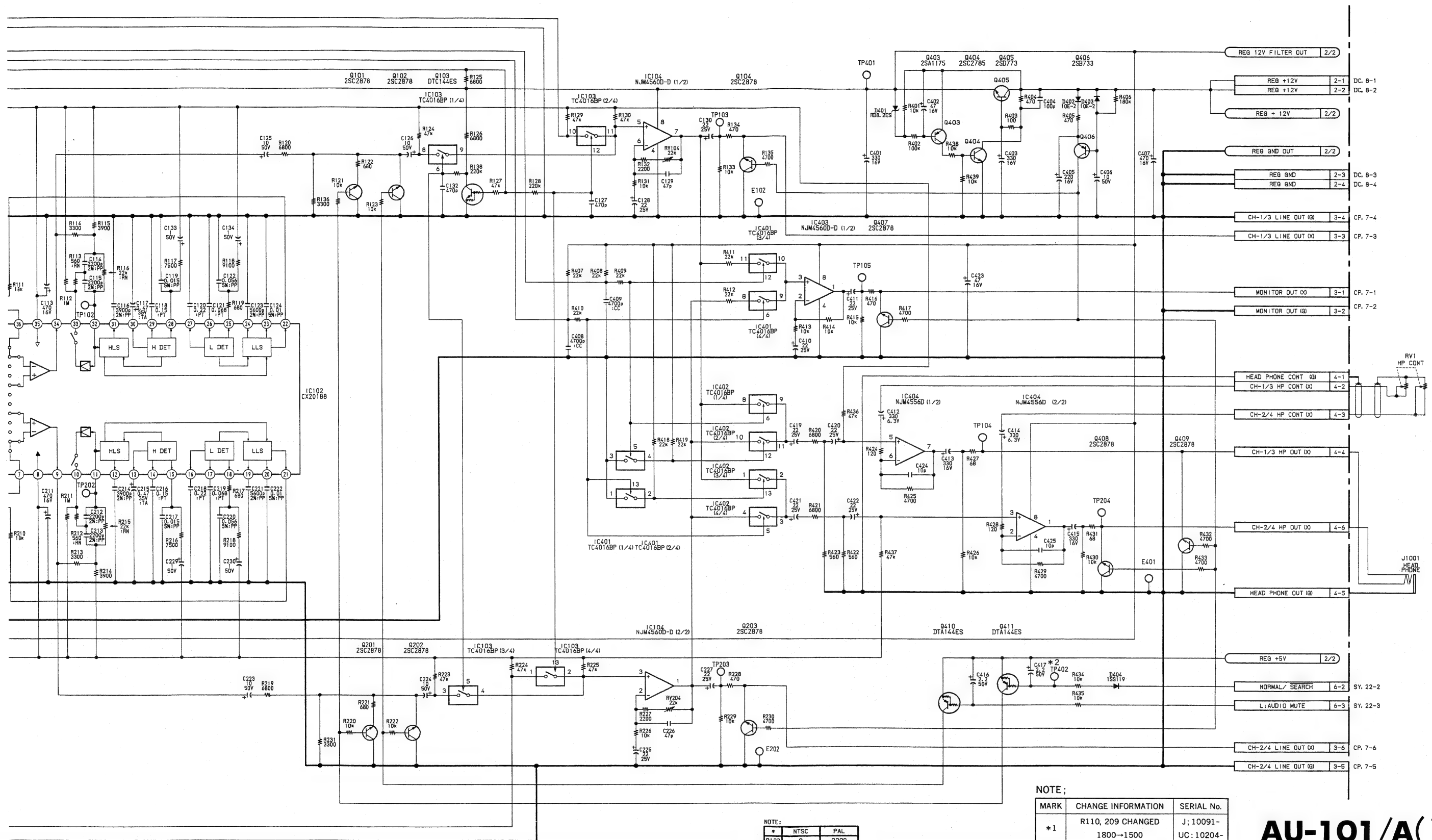
CP-123; VIDEO OUTPUT AMPLIFIER
PTC-31; THREADING MOTOR FG DETECTOR



CP-123
1-626-306-12, 13(1)
BVW-22
BVW-22P

AU-101A(1/2); AUDIO PB AMPLIFIER





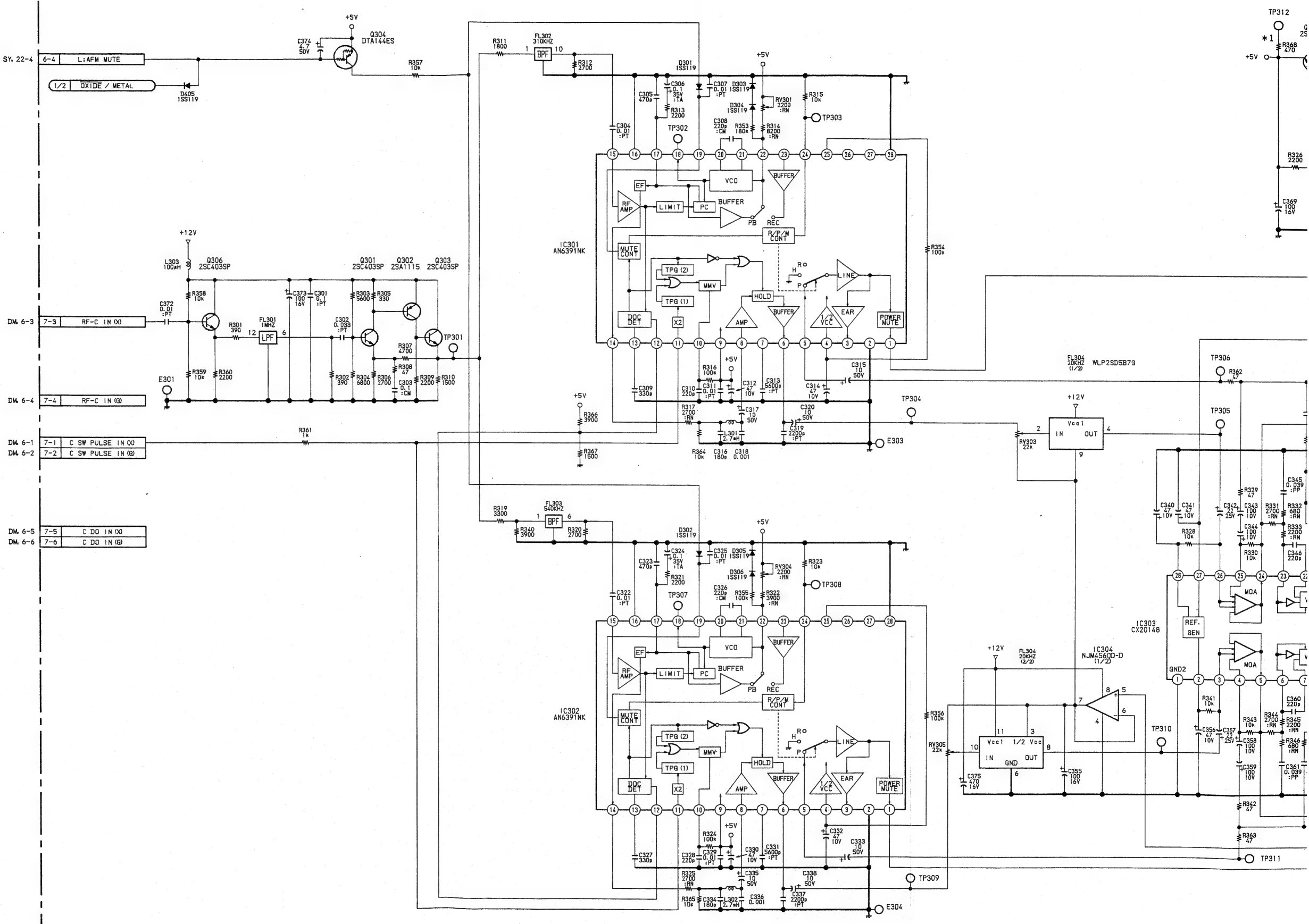
MARK	CHANGE INFORMATION	SERIAL No
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*2	TP402 ADDED	J: 10091- UC: 10204 EK: 10189

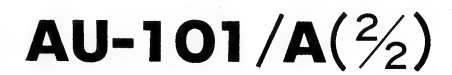
AU-101 / A($\frac{1}{2}$)

1-626-319-12, 13(2)
BVW-22
BVW-22P

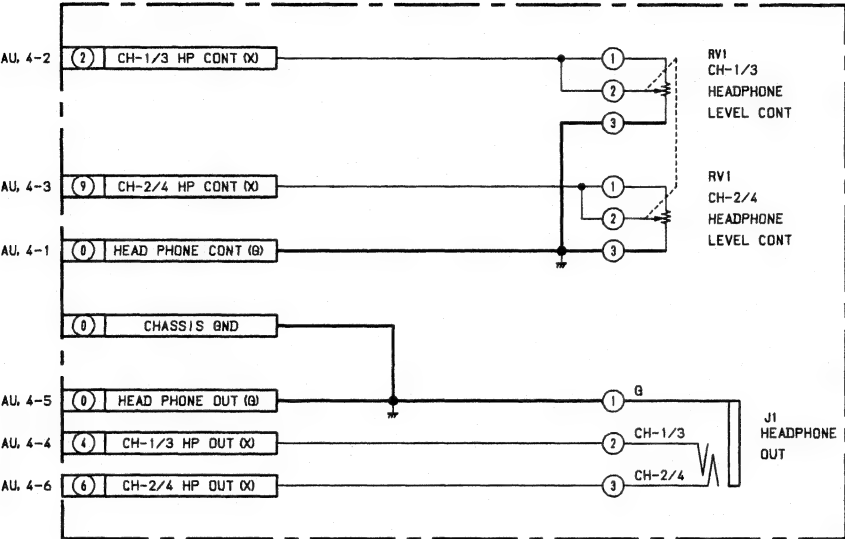
AU-101A(2/2); AUDIO PB AMPLIFIER

1
2
3
4
5



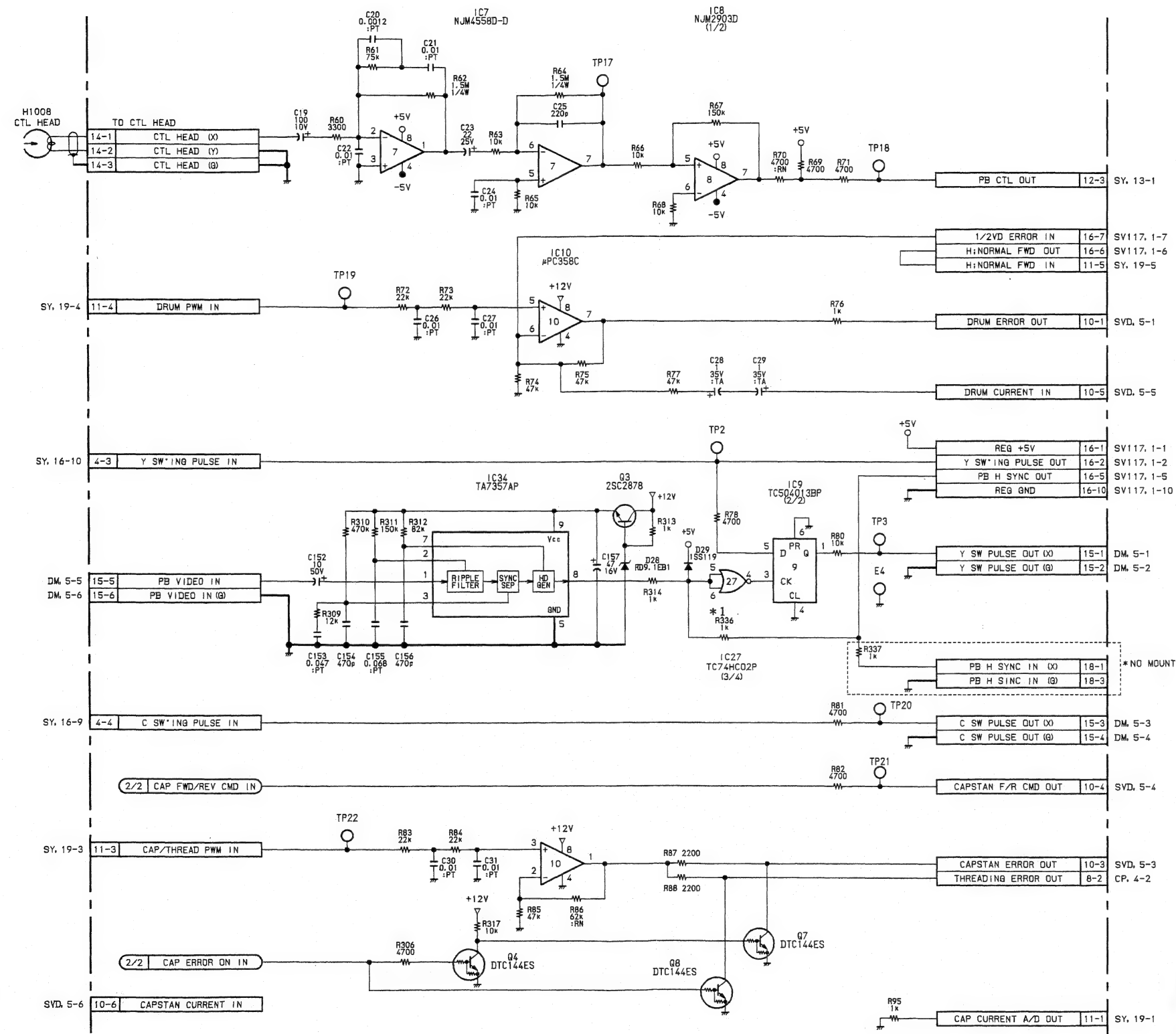
BVW-22
BVW-22P

HP-38; HEADPHONES VOLUME/JACK



HP-38
I-626-307-11(1)
BVW-22
BVW-22P

SV-99(1/2); DRUM/CAPSTAN/REEL SERVO



NOTE:

MARK	CHANGE INFORMATION	SERIAL No.
*1	R336 ADDED	J: 10091- UC: 10204- EK: 10189-

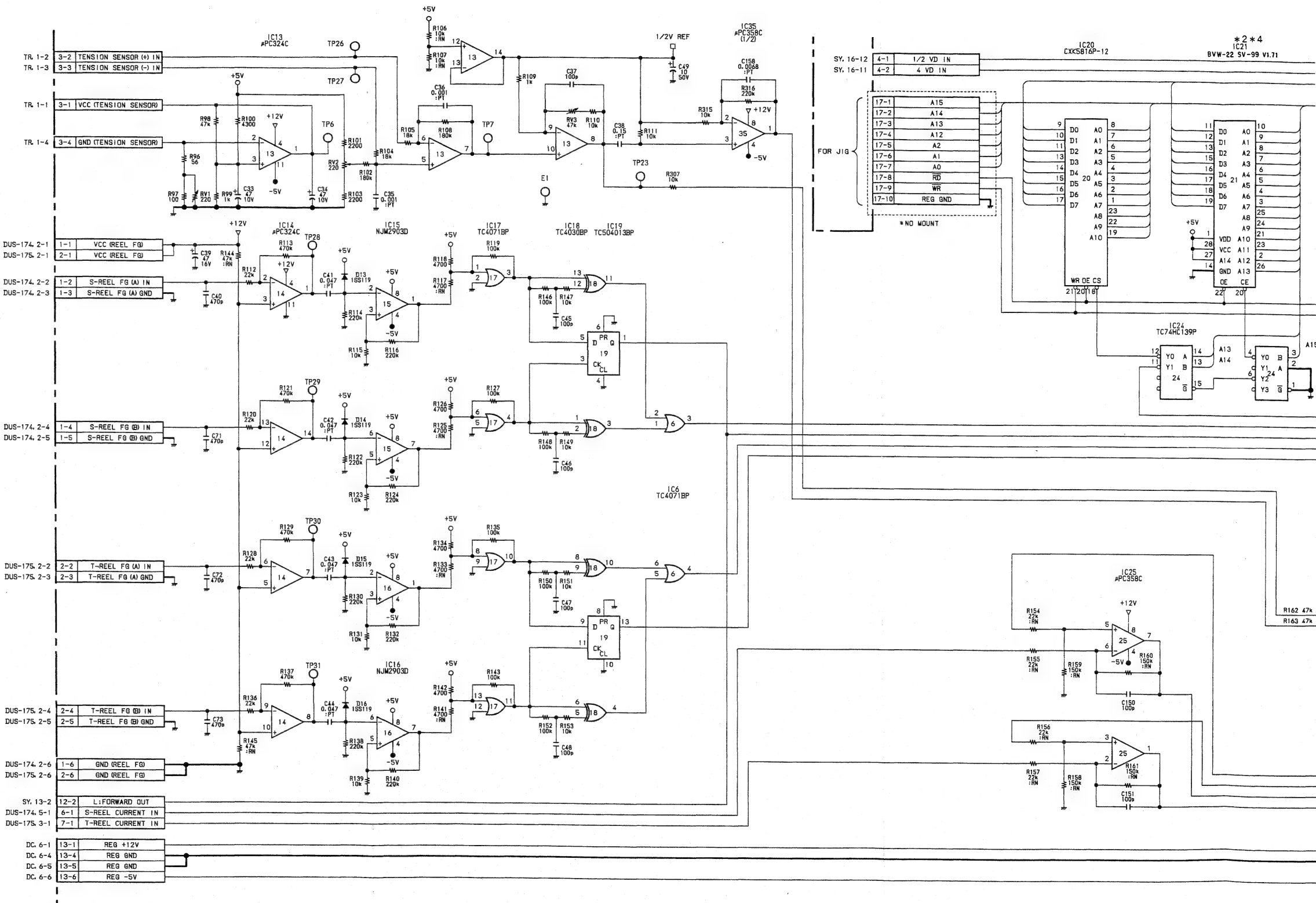
SV-99(1/2)

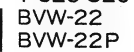
I-626-320-11, 12(2)
BVW-22
BVW-22P

SV-99(2/2); DRUM/CAPSTAN/REEL SERVO

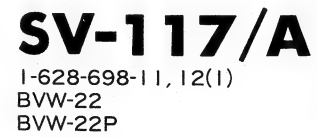
NOTE;

MARK	CHANGE INFORMATION	SERIAL No.
*1	CN5, 9 NOT MOUNTED	J;10091- UC;10204-
*2	IC21 CHANGED MBM27128-25→ BVW-22 SV-99 V1.6	EK;10189-
*3	Q1,2 CHANGED 2SD1685-F→ 2SD1685-G	J;10141- UC;10294-
*4	IC21 CHANGED BVW-22 SV-99 V1.6 →BVW-22 SV-99 V1.71	EK;10229-

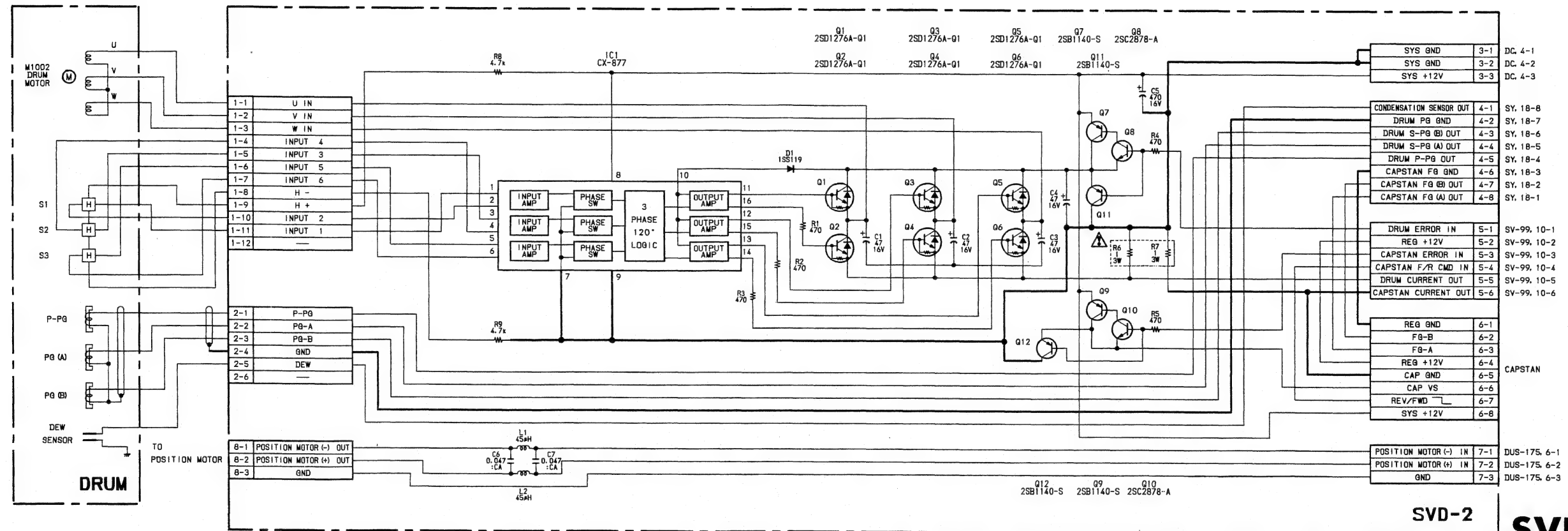




SV-117A; PICTURE SPLITTING COMPENSATOR



SVD-2; DRUM/CAPSTAN MOTOR DRIVER



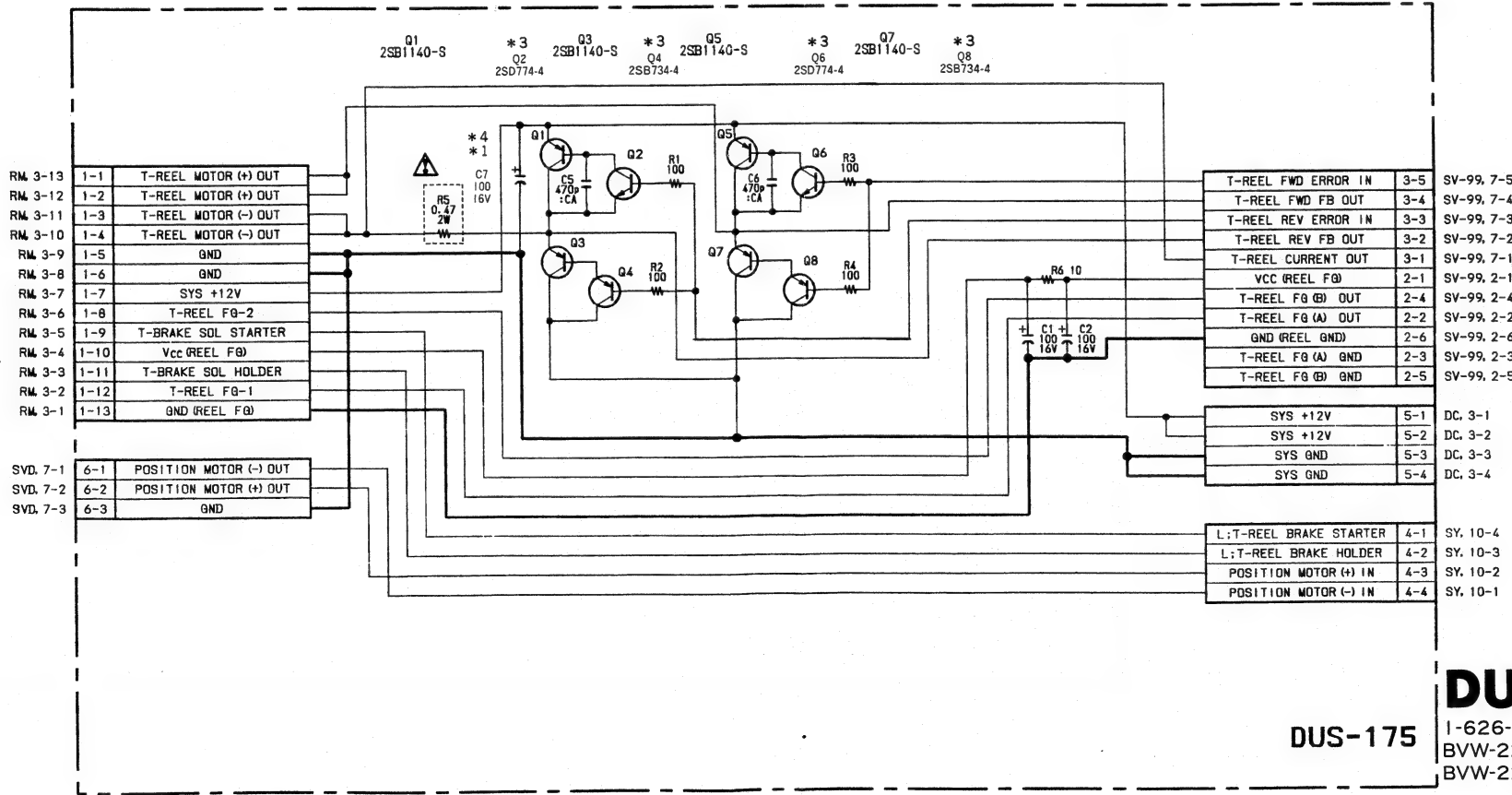
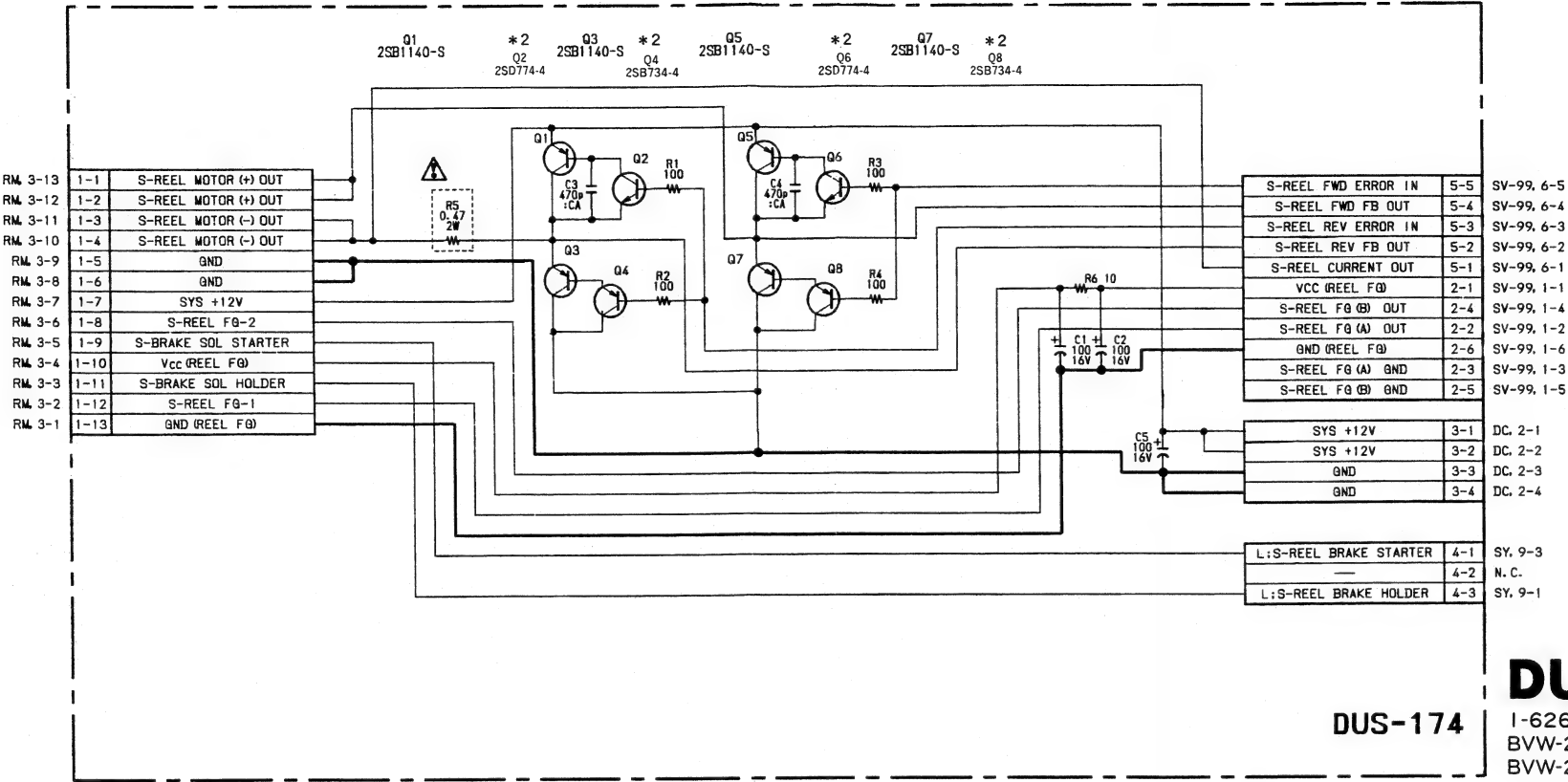
NOTE:

The shaded and -marked components are critical to safety.
Replace only with same components as specified.

DUS-174; REEL MOTOR DRIVER
DUS-175; REEL MOTOR DRIVER

NOTE;

MARK	ADDRESS	CHANGE INFORMATION	SERIAL No.
*1	4-D	C7 ADDED (DUS-175 BOARD)	EK; 10364-
*2	1-D	Q2 CHANGED 2SC2878-A ↓ 2SD774-4	EK: 11143-
	2-D	Q4 CHANGED 2SA844-C ↓ 2SB734-4	
	1-E	Q6 CHANGED 2SC2878-A ↓ 2SD774-4	
	2-E	Q8 CHANGED 2SA844-C ↓ 2SB734-4	
	4-D	Q2 CHANGED 2SC2878-A ↓ 2SD774-4	
	4-D	Q4 CHANGED 2SA844-C ↓ 2SB734-4	
	4-E	Q6 CHANGED 2SC2878-A ↓ 2SD774-4	
	4-E	Q8 CHANGED 2SA844-C ↓ 2SB734-4	
	4-D	C7 CHANGED 0.047 25V~100 16V (DUS-175 BOARD)	
	4-D		

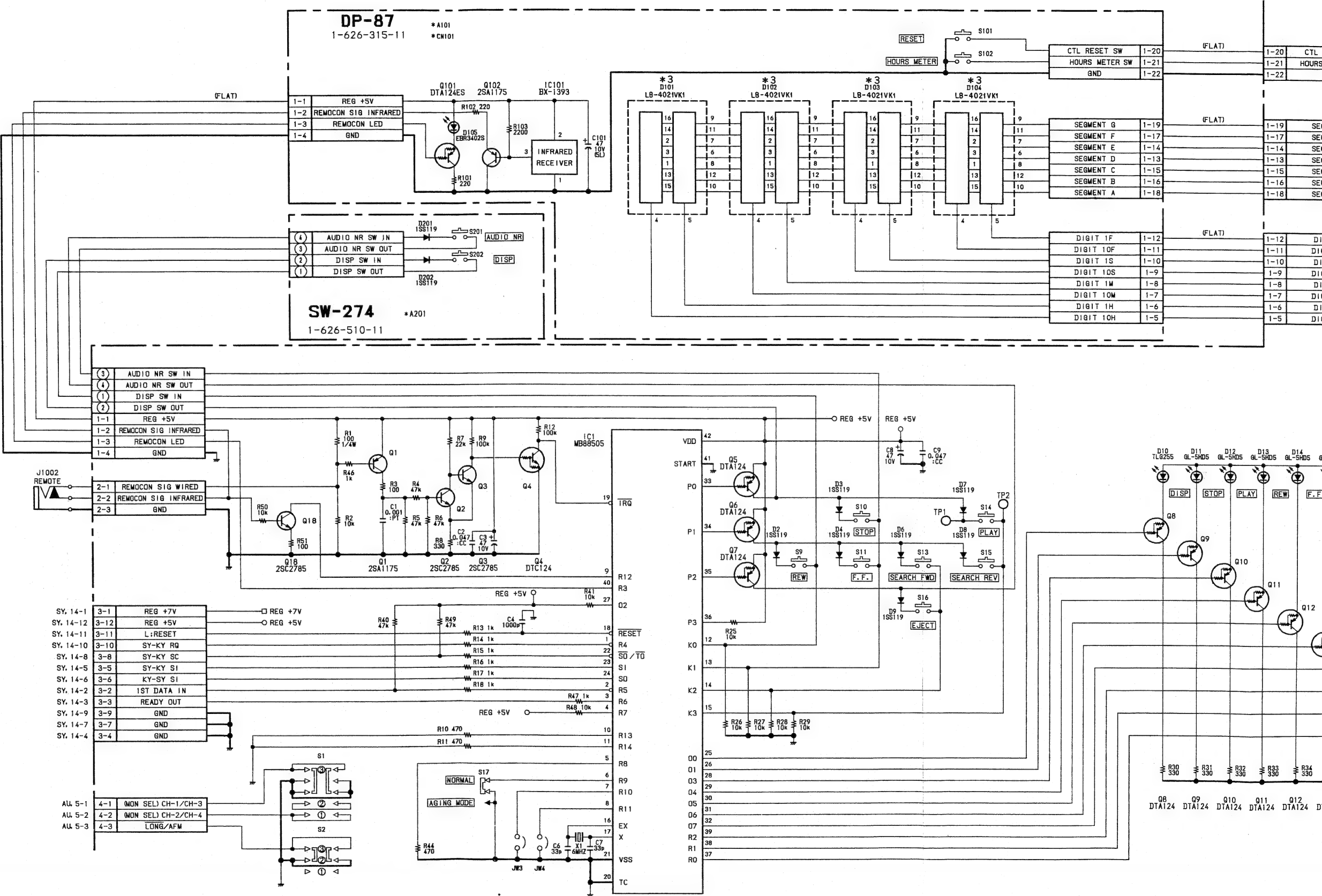


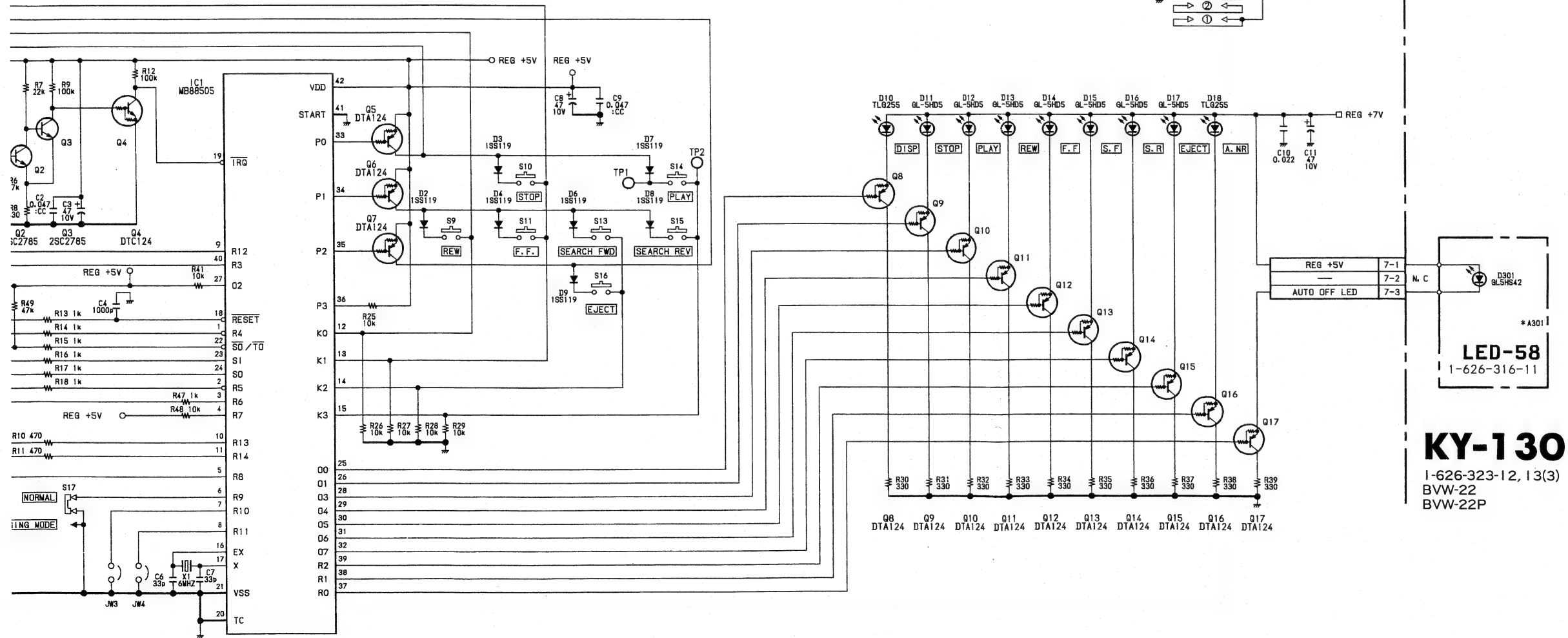
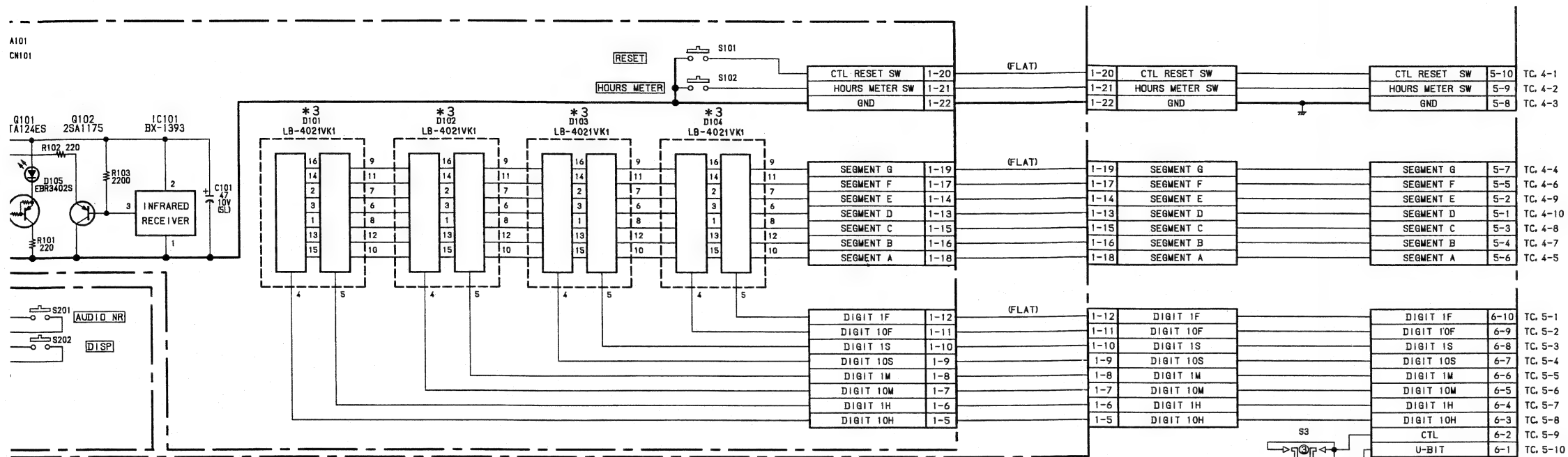
NOTE:
The shaded and ⚠-marked components are critical to safety.
Replace only with same components as specified.

KY-130; FUNCTION KEY/DISPLAY
DP-87; TIME COUNTER DISPLAY
SW-274; DOLBY NR/SUPERIMPOSE SWITCH
LED-58; AUTO OFF DISPLAY

NOTE;

MARK	CHANGE INFORMATION	SERIAL No.
*1	S17 ADDED	J; 10091- UC; 10204- EK; 10189-
*2	R43 DELETED	
*3	D101-104 CHANGED LB-402VK1 →LB-4021VK1	J; 10141- UC; 10294- EK; 10229-

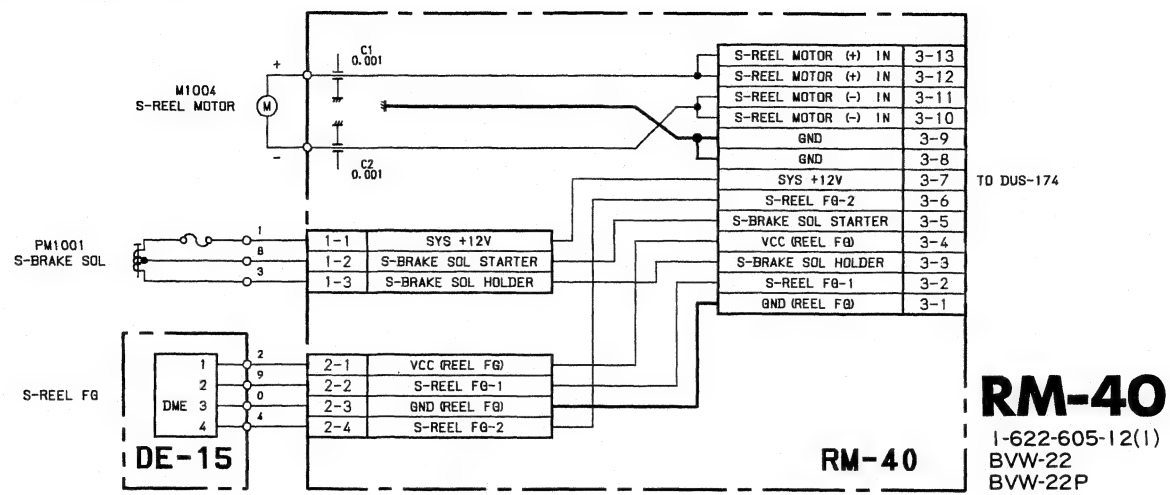




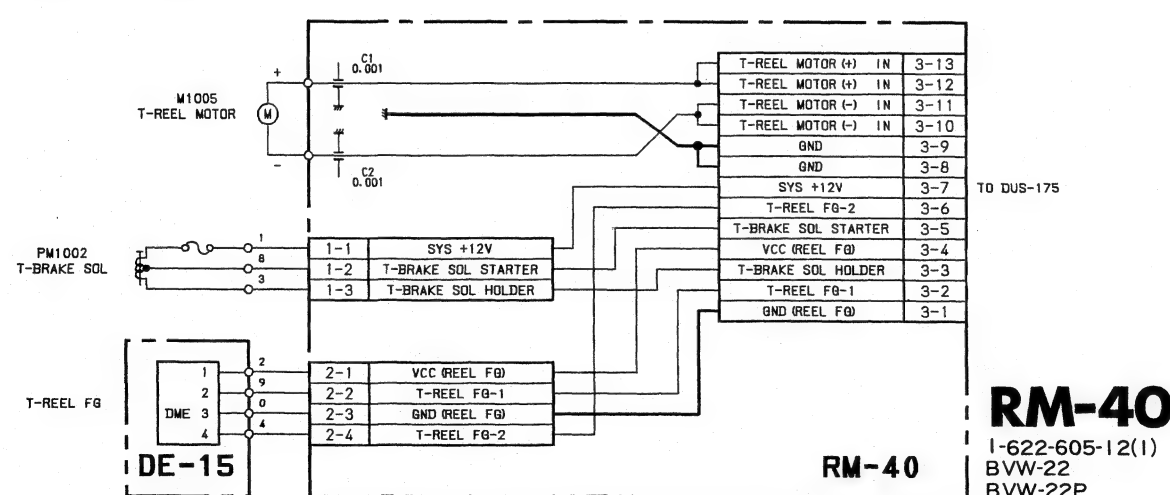
DE-15, RM-40

DE-15; REEL FG
RM-40; RELAY BOARD FOR REEL MOTOR & BRAKE SOLENOID

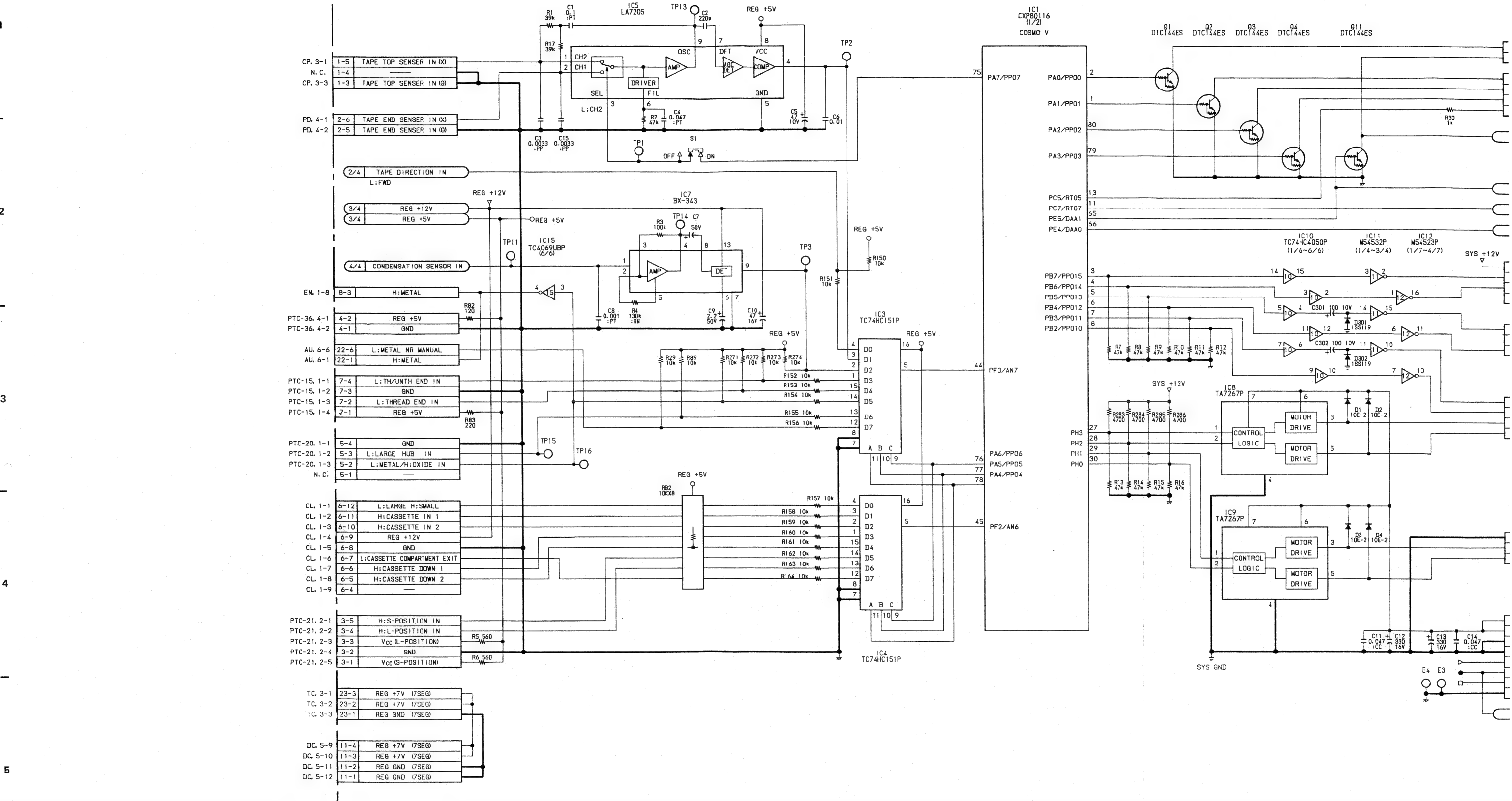
[Supply Side]

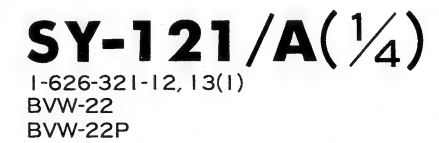


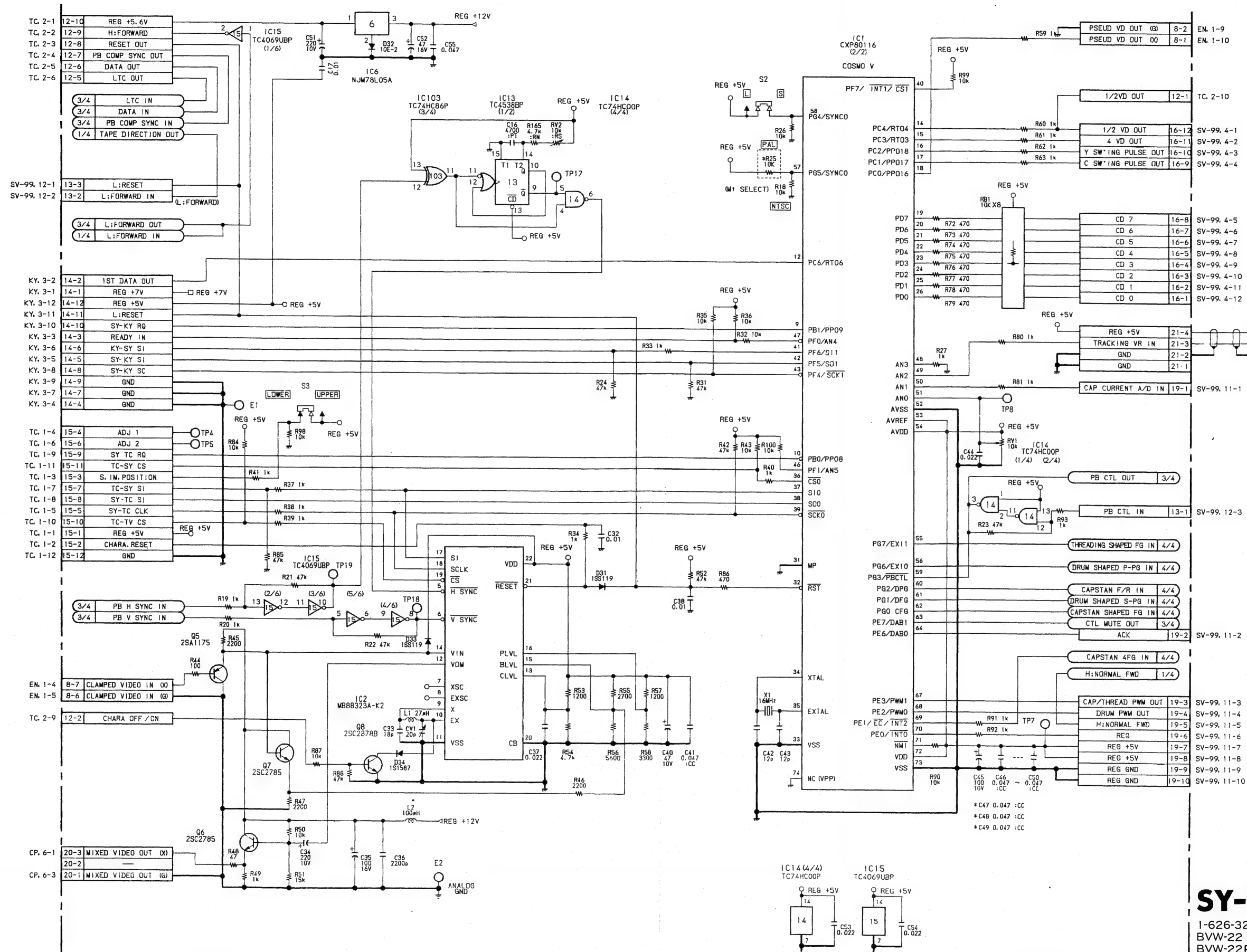
[Take-up Side]



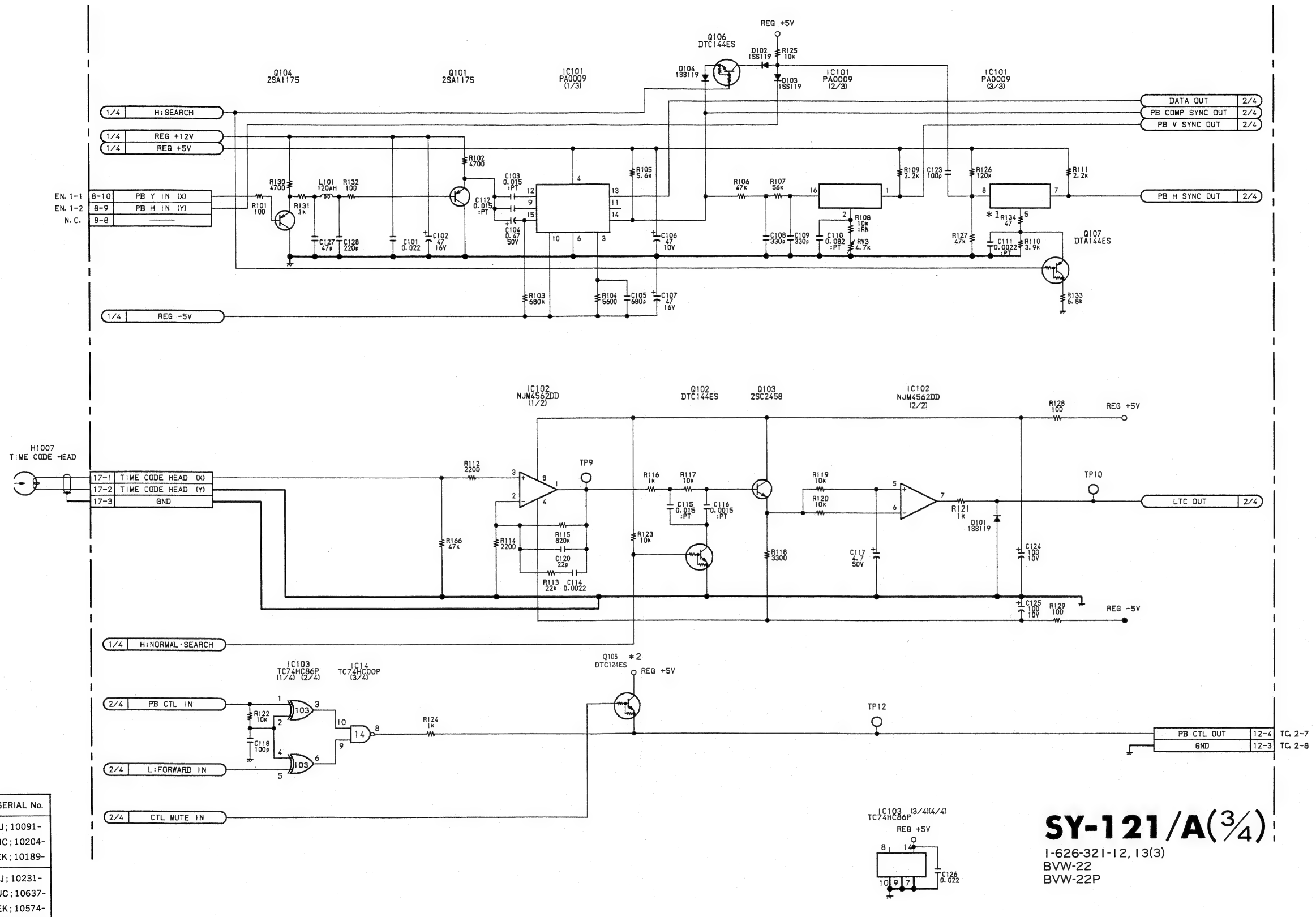
SY-121A(1/4); SYSTEM CONTROL



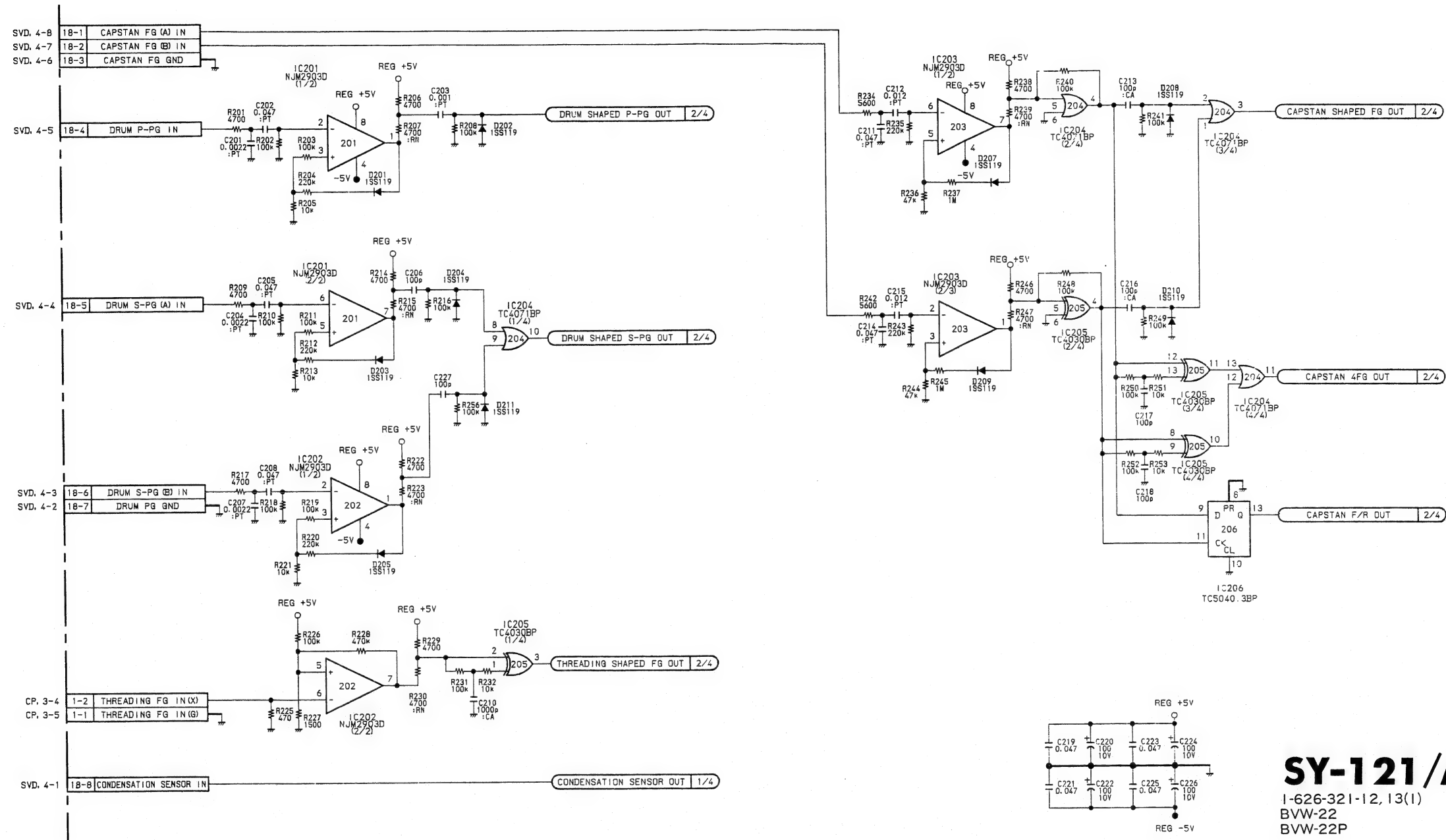


SY-121A(2/4); SYSTEM CONTROL
VR-69; TRACKING CONTROL VOLUME

SY-121A(3/4); SYSTEM CONTROL

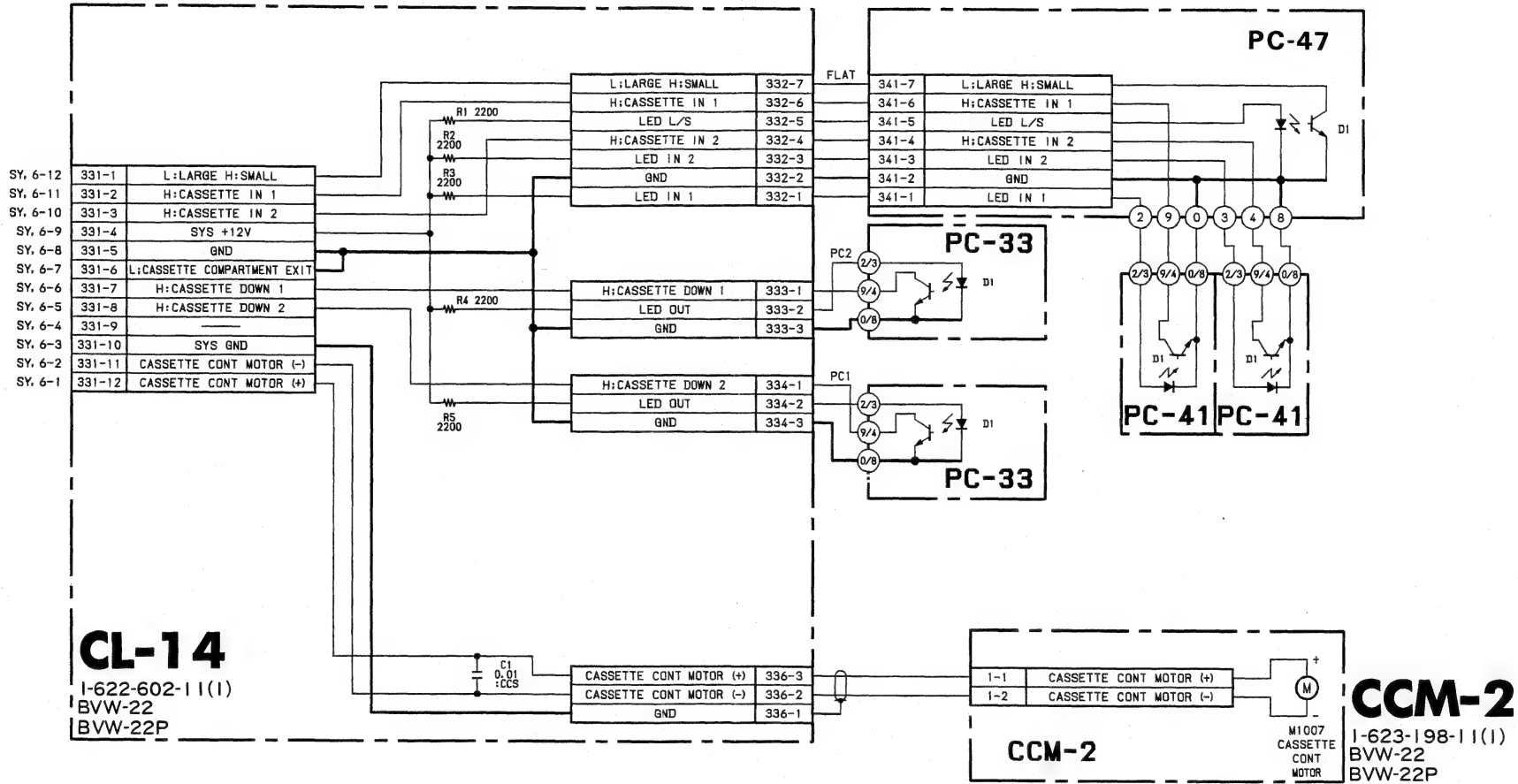


SY-121A(4/4); SYSTEM CONTROL

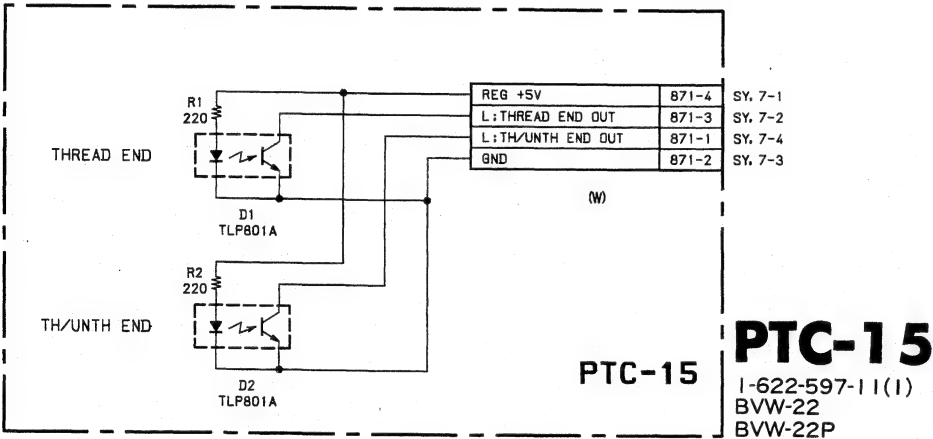
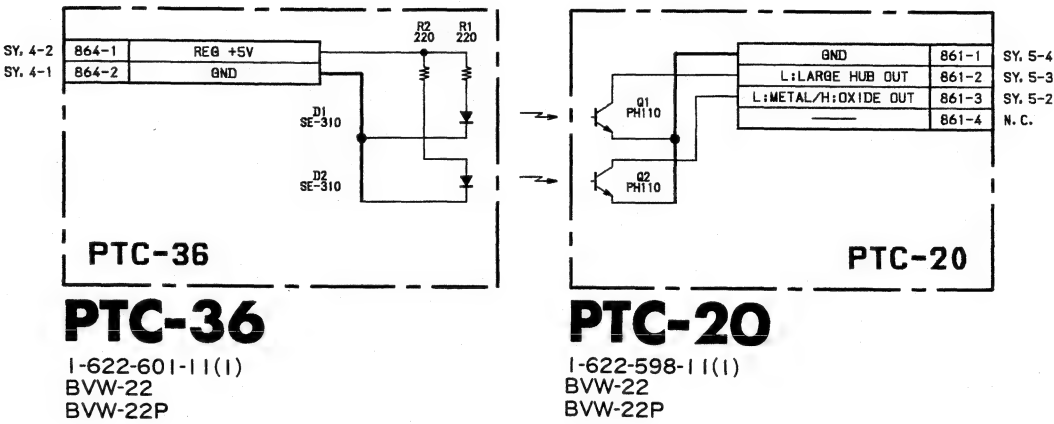
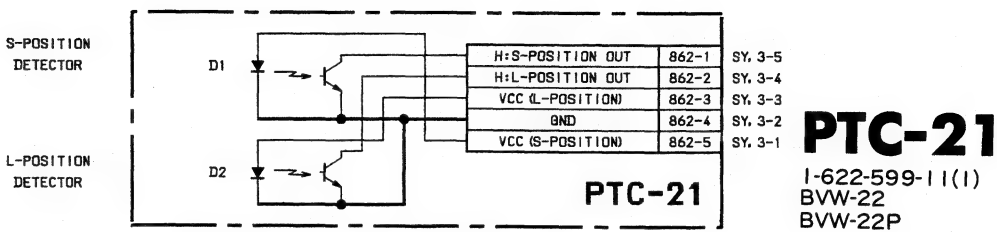
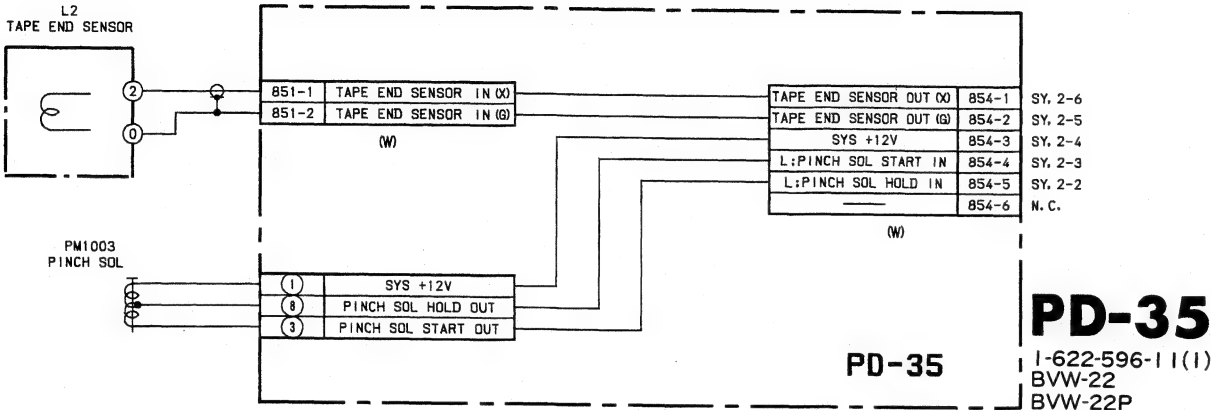


SY-121/A(4/4)
I-626-321-12, 13(I)
BVW-22
BVW-22P

CCM-2; CASSETTE-UP COMPARTMENT MOTOR
CL-14; CASSETTE-UP COMPARTMENT
PC-33; CASSETTE-UP COMPARTMENT (CASSETTE UP/DOWN DETECTOR)
PC-41; CASSETTE-UP COMPARTMENT (CASSETTE IN DETECTOR)
PC-47; CASSETTE-UP COMPARTMENT (L/S DETECTOR)



- PD-35; PINCH SOLENOID
- PTC-15; THREAD/UNTHREAD END SENSOR
- PTC-20; CASSETTE DETECTOR
- (TAPE THICKNESS, REEL HUB DIAMETER, METAL/OXIDE)
- PTC-21; REEL TABLE POSITION DETECTOR
- PTC-36; CASSETTE DETECTOR
- (TAPE THICKNESS, REEL HUB DIAMETER, METAL/OXIDE)



TC-49A; TIME CODE READER

1

2

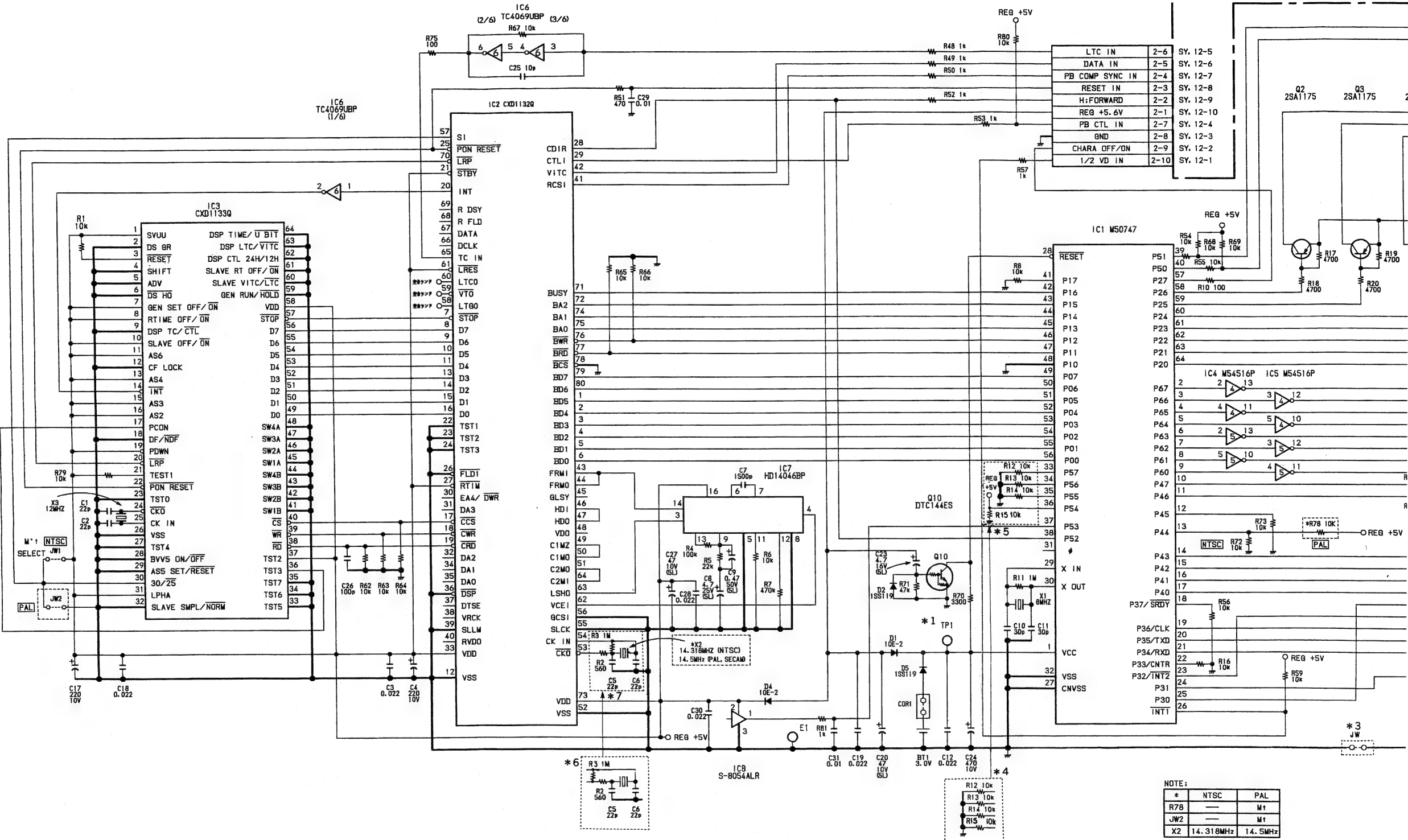
3

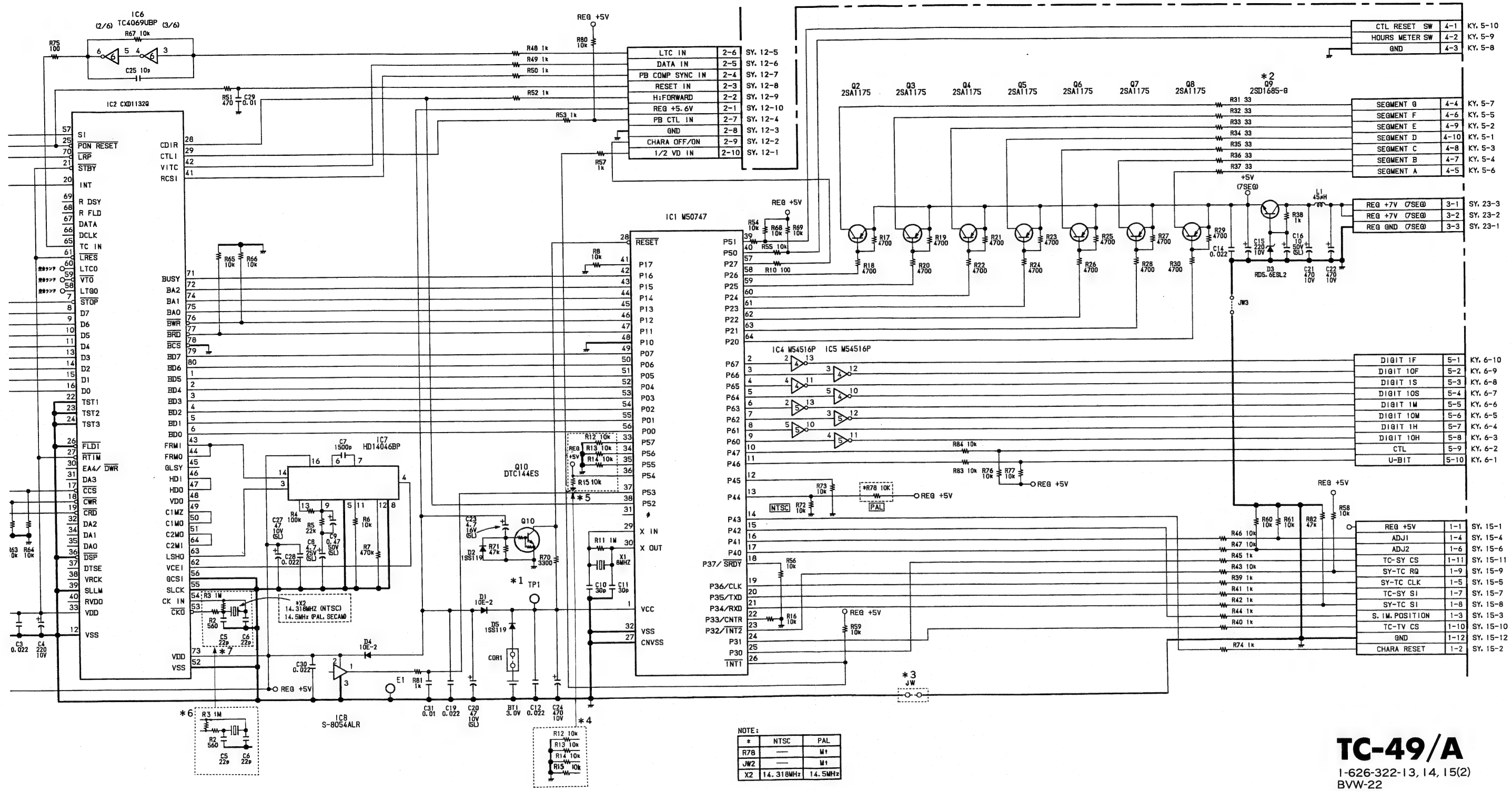
4

5

NOTE:

MARK	CHANGE INFORMATION	SERIAL No.
*1	TP1 DELETED	J; 10091-UC; 10204-EK; 10189-
*2	Q9 CHANGED 2SD1685-F→2SD1685-G	J; 10141-UC; 10294-EK; 10229-
*3	JW21, 27 ADDED	J; 10091-UC; 10204-EK; 10189-
*4	Refer to schematic diagram	J; 10001-10140-UC; 10001-10293-EK; 10061-10228-
*5	Refer to schematic diagram	J; 10141-UC; 10294-EK; 10229-
*6	Refer to schematic diagram	J; 10001-10150-UC; 10001-10332-EK; 10061-10363-
*7	Refer to schematic diagram	J; 10151-UC; 10333-EK; 10364-



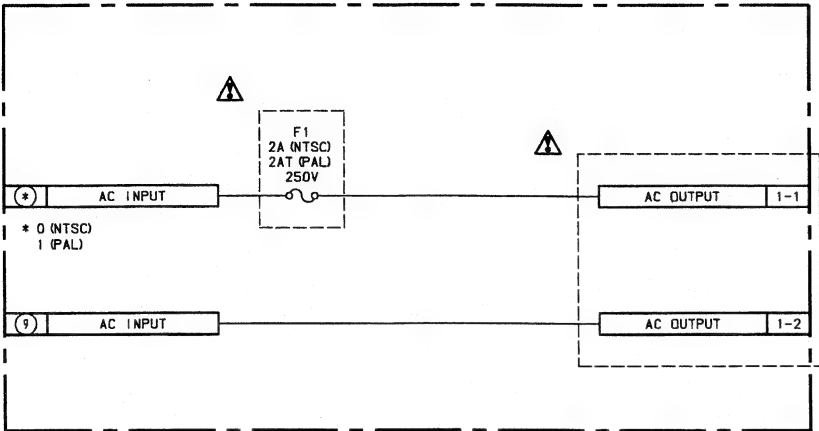


NOTE:

*	NTSC	PAL
R78	—	M1
JW2	—	M1
X2	14.318MHz	14.5MHz

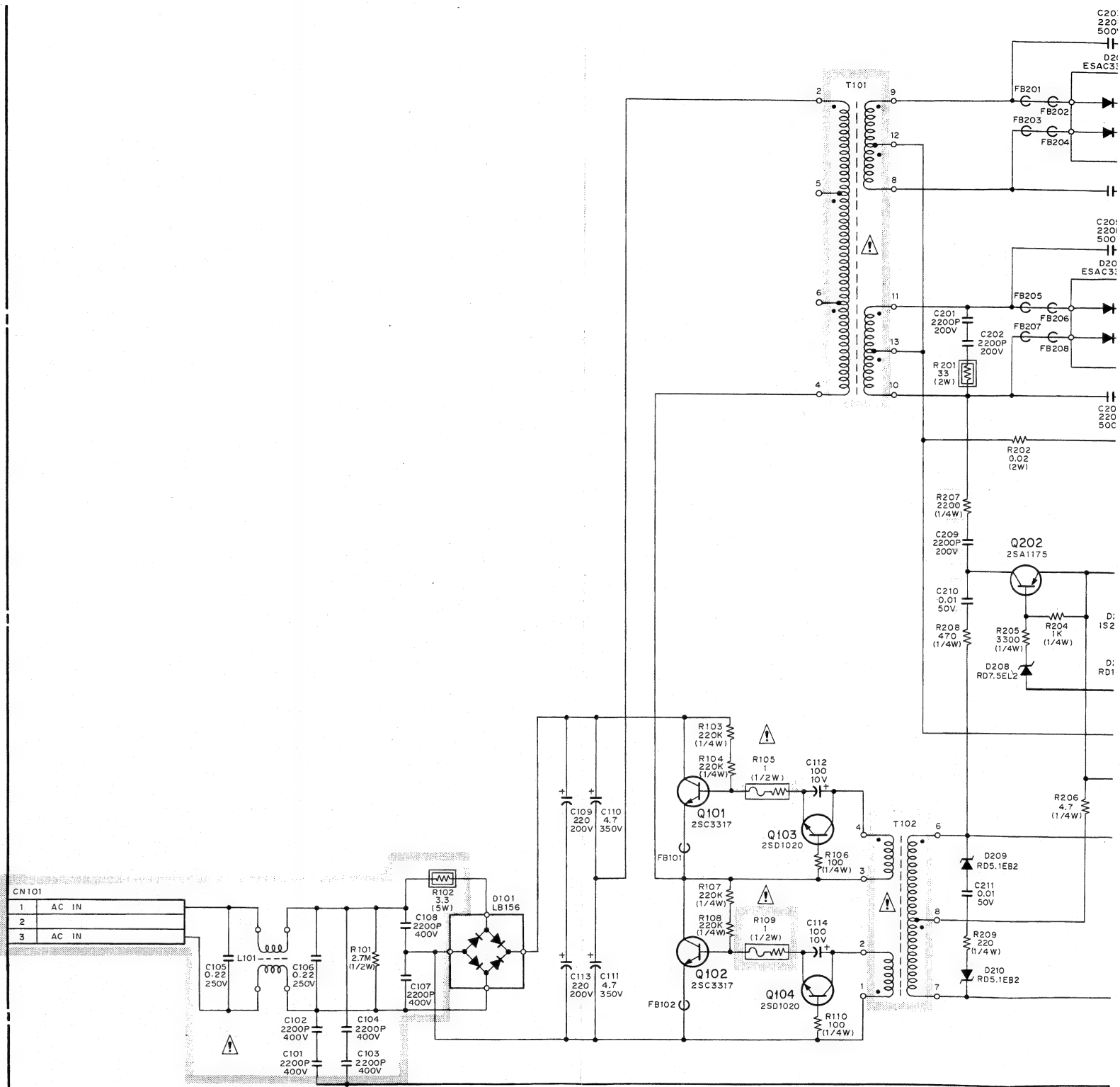
TC-49/A
 1-626-322-13, 14, 15(2)
 BVW-22
 BVW-22P

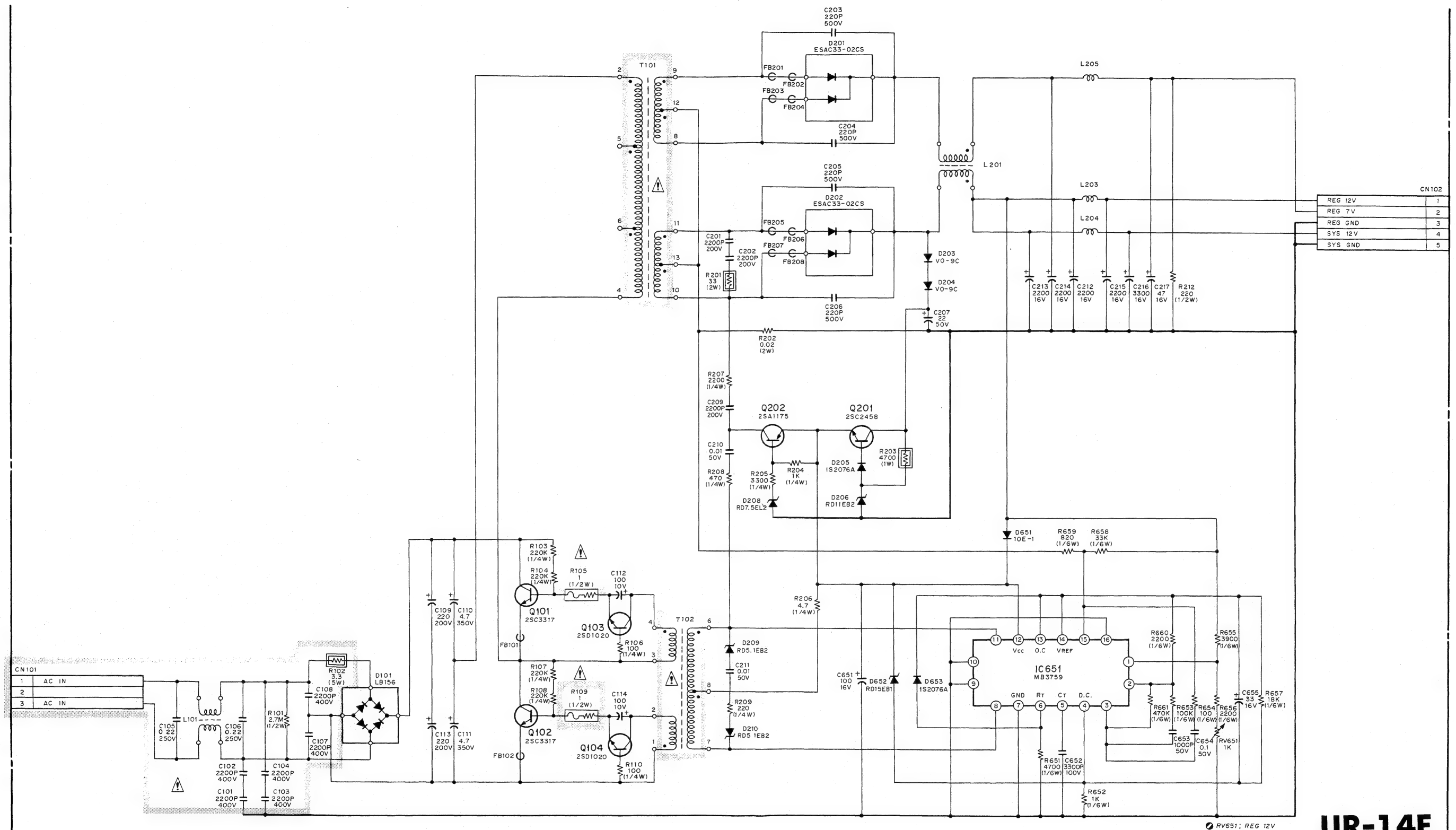
UR-14E; SWITCHING REGULATOR
AC-93A; AC INPUT



AC-93/A
I-626-309-11, 12(I)
BVW-22
I-626-309-21, 22(I)
BVW-22P

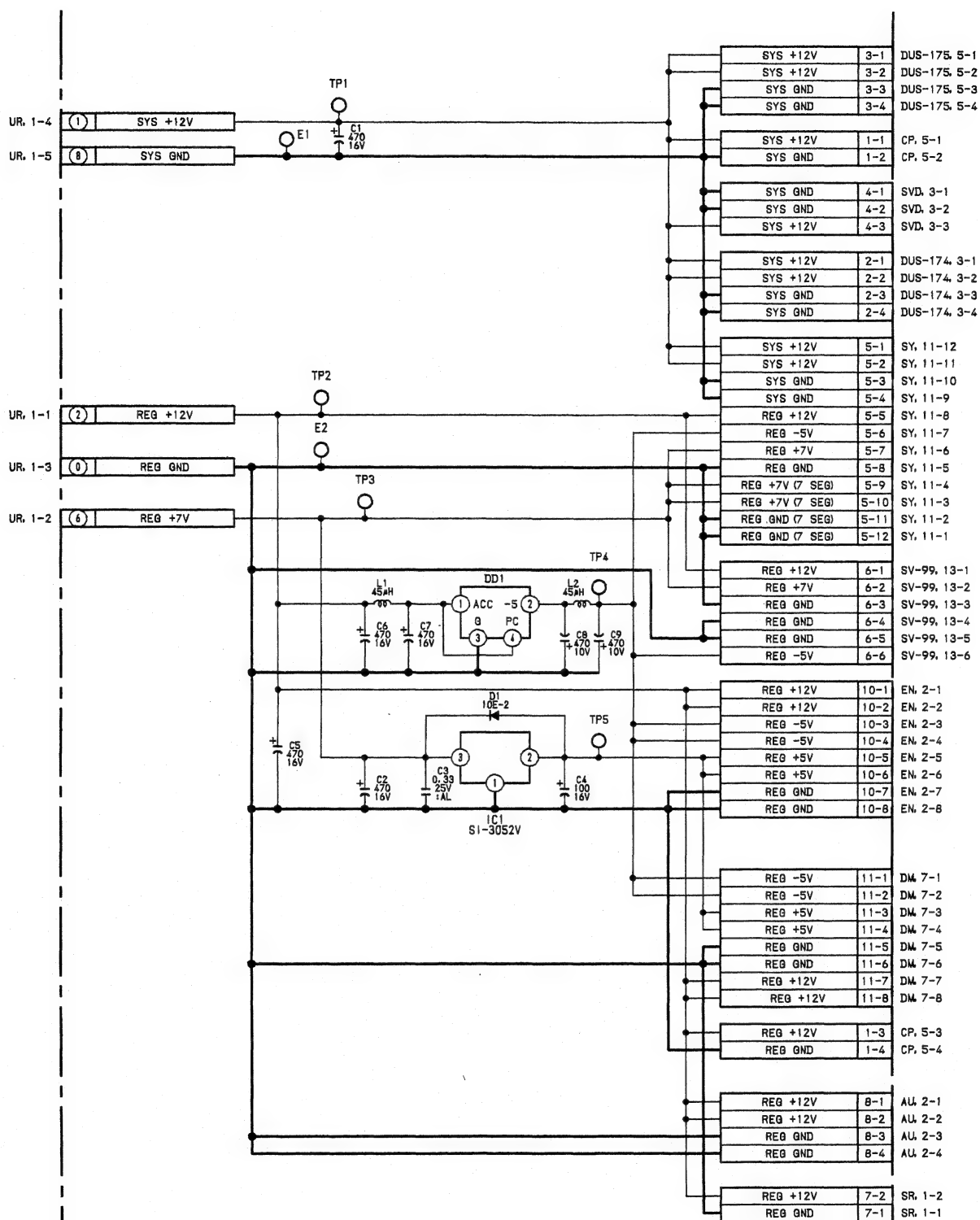
NOTE:
The shaded and ⚠-marked components are critical to safety.
Replace only with same components as specified.



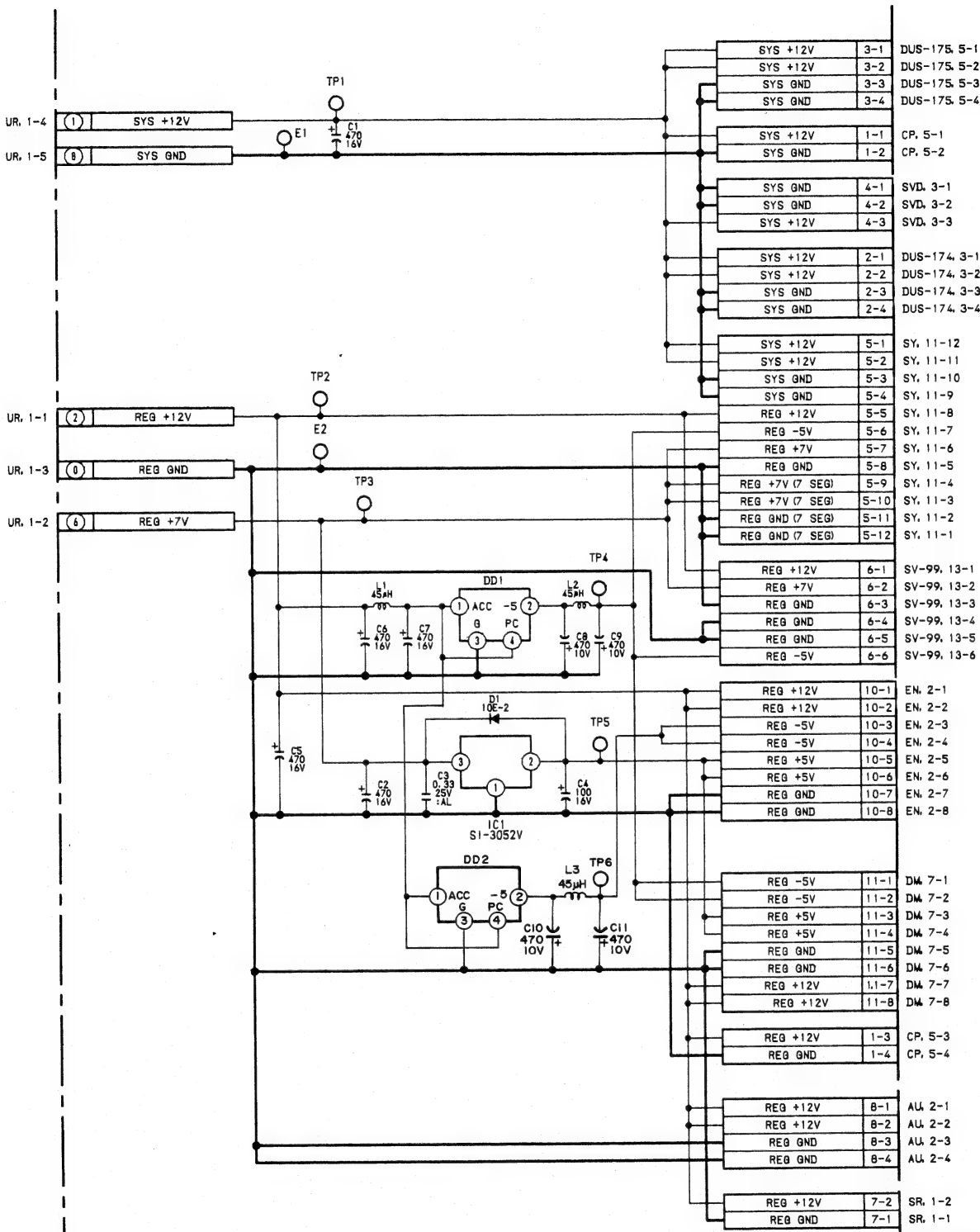


UR-14E


1-413-249-12(1)
BVW-22P

**DC-36**1-626-311-11(1)
BVW-22
BVW-22P

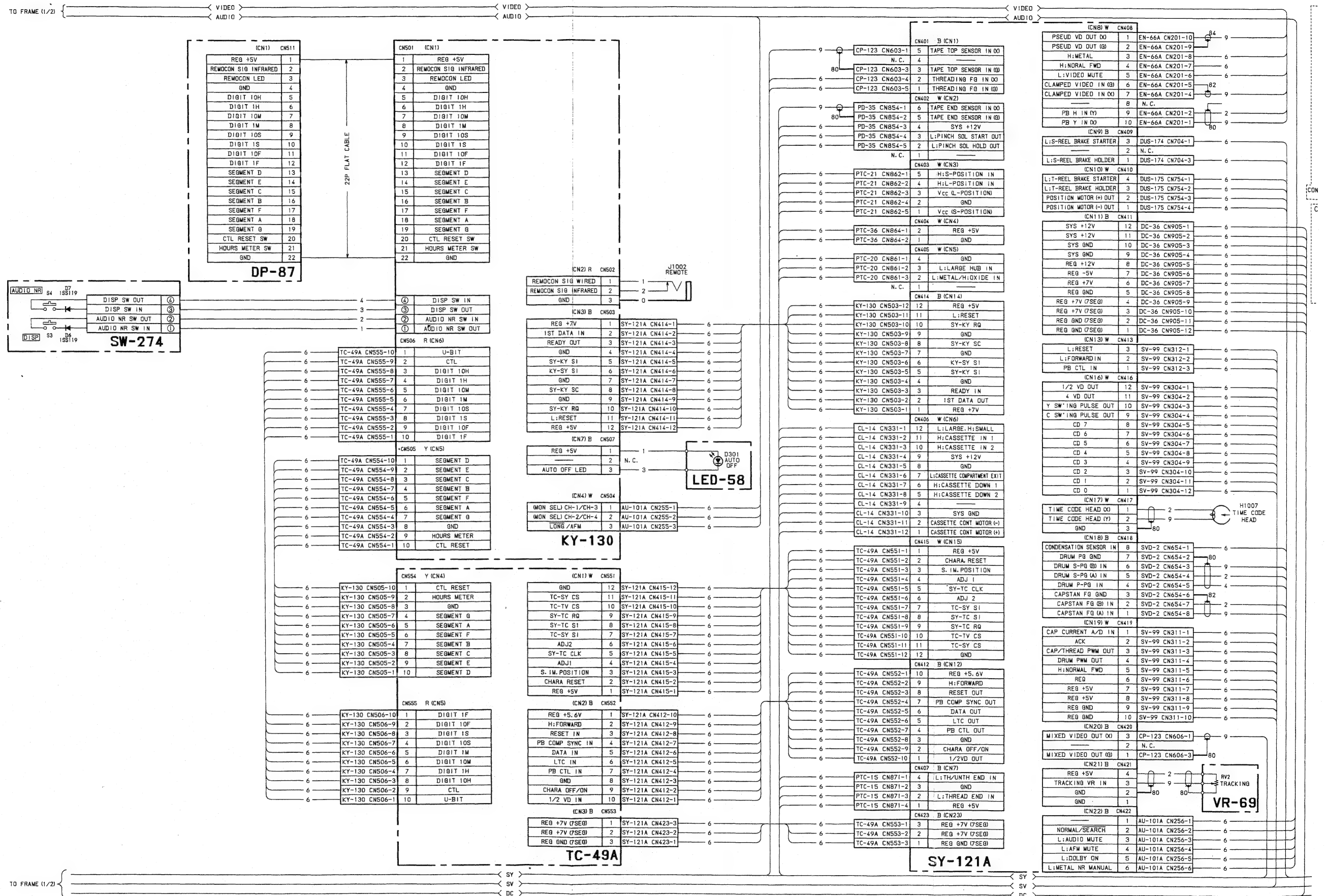
DC-36; DC SUPPLY S/N 11058 AND HIGHER (EK)

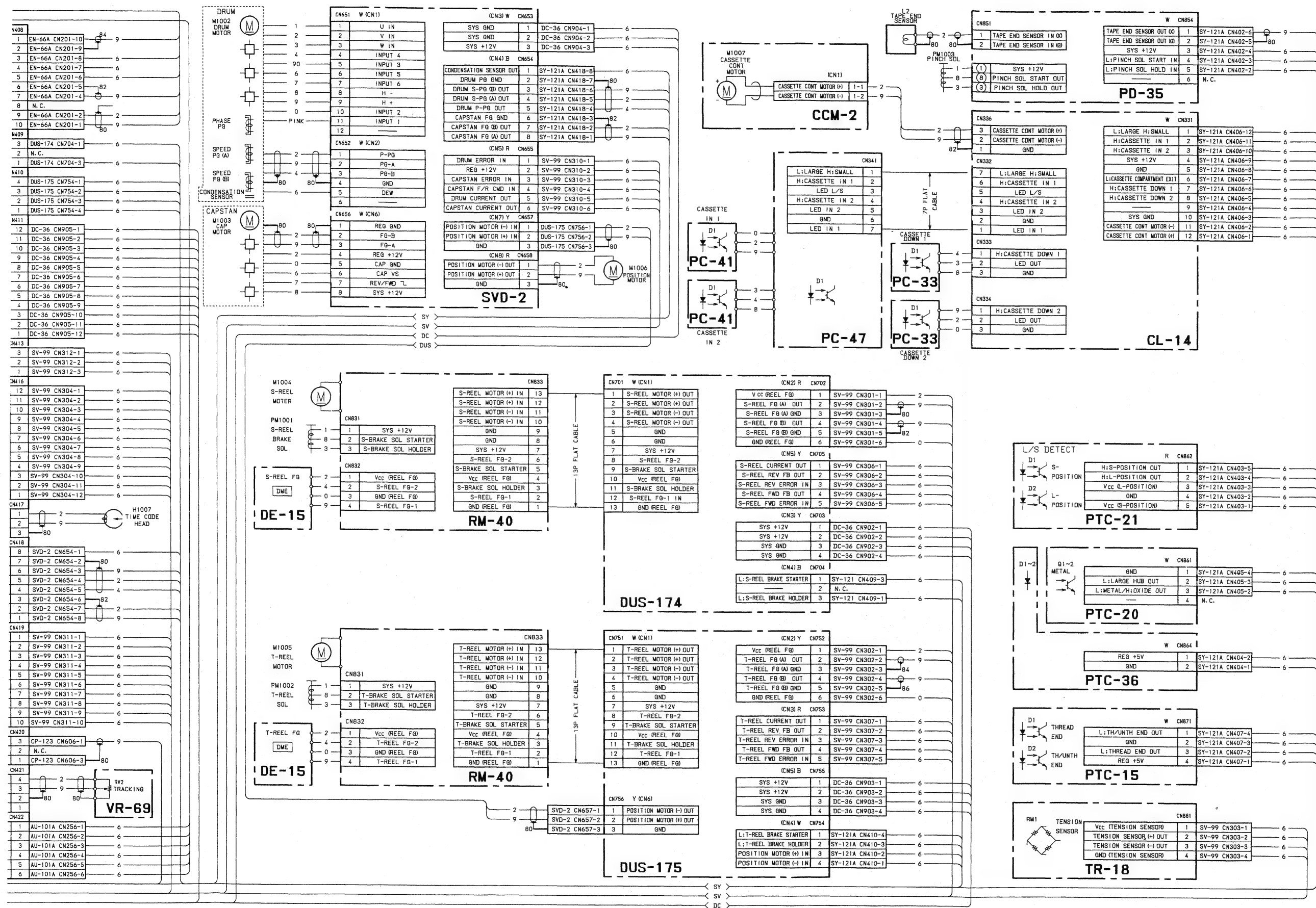


DC-36
1-626-311-12(1)
BVW-22
BVW-22P

The shaded and -marked components are critical to safety.
Replace only with same components as specified.







SECTION 16 PRINTED WIRING BOARDS

The circuit information is provided below.

SYSTEM	BOARD	CIRCUIT FUNCTION
VIDEO	DM-74	Video Demodulator
	EN-66A	Video Encoder
	CP-123	Video Output Amplifier
AUDIO	AU-101A	Audio PB Amplifier
	HP-38	Headphones Volume/Jack
SERVO	SV-99	Drum/Capstan/Reel Servo
	SV-117A	Picture Splitting Compensator
	SVD-2	Drum/Capstan Motor Driver
	DE-15	Reel FG
	DUS-174	Reel Motor Driver
	DUS-175	Reel Motor Driver
	TR-18	Tape Tension Sensor
	VR-69	Tracking Control Volume
SYSTEM CONTROL	KY-130	Function Key/Display
	DP-87	Time Counter Display
	SW-274	Dolby NR/Superimpose Switch
	LED-58	Auto Off Display
	SY-121A	System Control
	CCM-2	Cassette-up Compartment Motor
	CL-14	Cassette-up Compartment
	PC-47	Cassette-up Compartment (L/S Detector)
	PC-33	Cassette-up Compartment (Cassette Up/Down Detector)
	PC-41	Cassette-up Compartment (Cassette IN Detector)
	PD-35	Pinch Solenoid
	PTC-15	Thread/ Unthread End Sensor
	PTC-20	Cassette Detector (Tape Thickness, Reel Hub Diameter, Metal/Oxide)
	PTC-21	Reel Table Position Detector
	PTC-31	Threading Motor FG Detector
	PTC-36	Cassette Detector (Tape Thickness, Reel Hub Diameter, Metal/Oxide)
	RM-40	Relay Board for Reel Motor & Brake Solenoid
TIME CODE	TC-49A	Time Code Reader
POWER	UR-14E	Switching Regulator
	AC-93A	AC Input
	DC-36	DC Supply

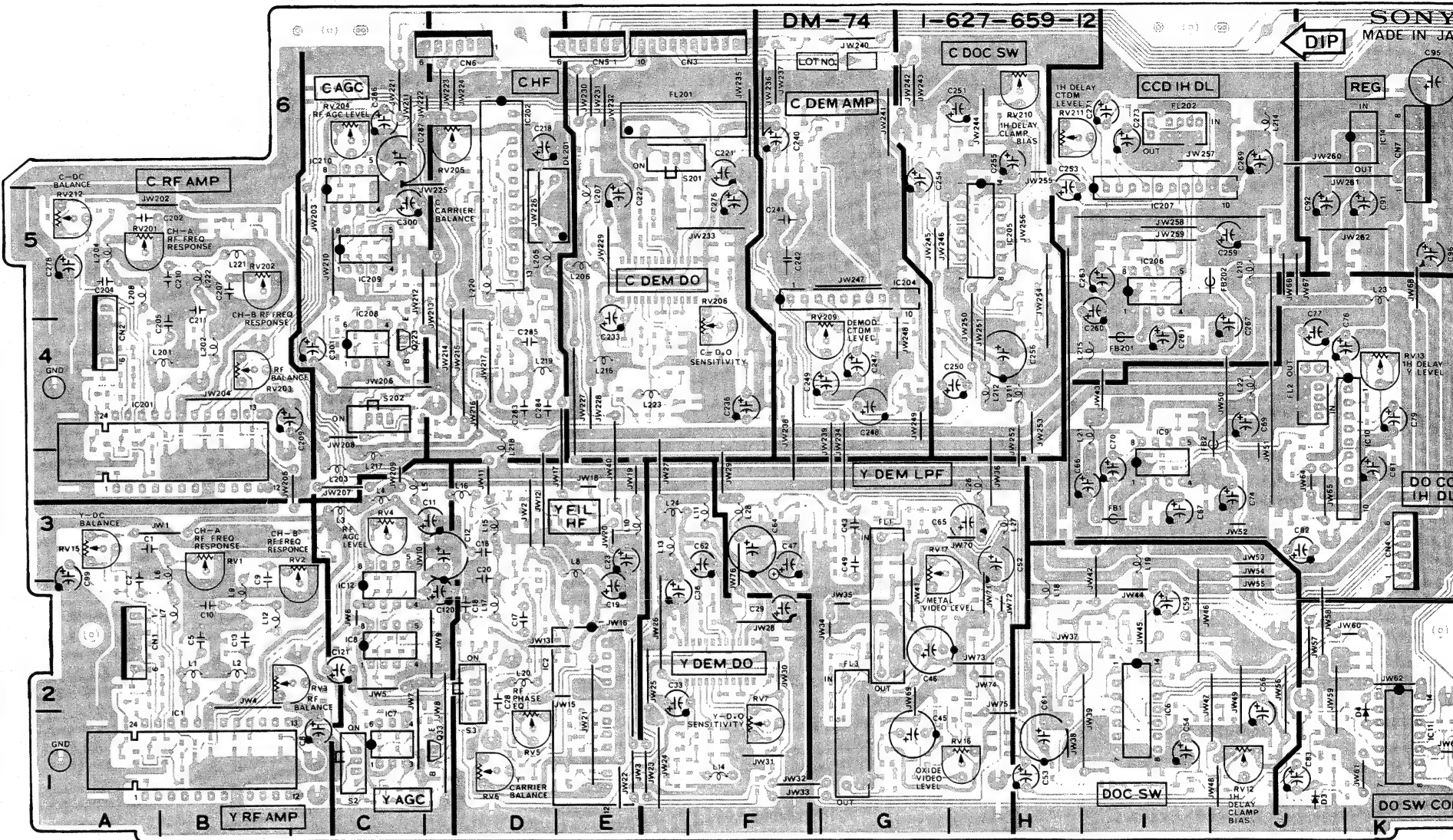
DM-74; VIDEO DEMODULATOR

S/N UP TO 10188 (EK)

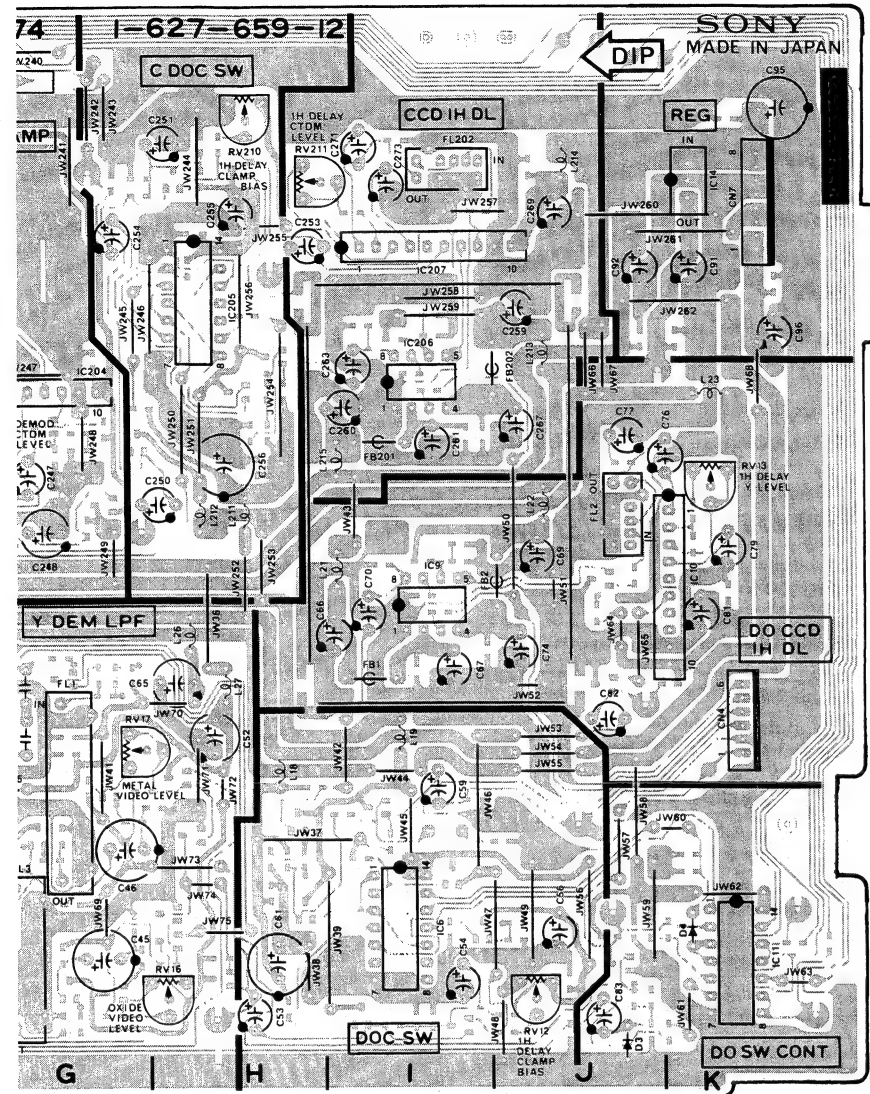
DM-74(1-627-659-12)

CN1	A-2	C	Q11	F-3	S	RV15	A-3	C
CN2	A-4	C	Q13	I-1	S	RV16	H-1	C
CN3	F-6	C	Q14	I-2	S	RV17	G-3	C
CN4	K-3	C	Q15	I-2	S	RV201	A-5	C
CN5	E-6	C	Q16	H-2	S	RV202	B-5	C
CN6	D-6	C	Q17	H-2	S	RV203	B-4	C
CN7	K-6	C	Q18	I-2	S	RV204	C-6	C
			Q19	J-4	S	RV205	D-6	C
D1	I-1	S	Q20	J-3	S	RV206	F-4	C
D3	J-1	C	Q21	J-1	S	RV209	G-4	C
D4	K-2	C	Q22	C-5	S	RV210	H-6	C
D201	H-6	S	Q23	D-2	S	RV211	H-6	C
			Q24	G-3	S	RV212	A-5	C
DL201	D-5	C	Q25	G-2	S			
			Q26	G-1	S	S2	C-1	C
E1	D-1	S	Q27	G-1	S	S3	D-2	C
E2	H-1	S	Q28	E-3	S	S201	E-6	C
E201	D-6	S	Q29	E-3	S	S202	C-4	C
E202	G-4	S	Q30	H-1	S			
E203	F-5	S	Q31	F-1	S	TP1	B-2	S
			Q32	C-1	S	TP2	B-2	S
FL1	F-3	C	Q33	D-1	C	TP3	C-2	S
FL2	J-4	C	Q34	D-2	S	TP4	C-1	S
FL3	G-1	C	Q35	H-2	S	TP5	C-1	S
FL201	F-6	C	Q36	G-2	S	TP6	D-2	S
FL202	I-6	C	Q37	H-2	S	TP7	D-1	S
			Q38	H-2	S	TP9	J-2	S
IC1	B-1	C	Q39	H-1	S	TP11	H-1	S
IC2	E-2	C	Q201	B-4	S	TP12	J-2	S
IC4	F-2	S	Q202	B-5	S	TP13	J-3	S
IC6	I-2	C	Q203	A-4	S	TP14	K-2	S
IC7	C-1	C	Q204	A-4	S	TP15	K-1	S
IC8	C-2	C	Q205	C-4	S	TP16	J-5	S
IC9	I-3	C	Q206	D-4	S	TP201	B-4	S
IC10	K-4	C	Q208	E-4	S	TP202	B-4	S
IC11	K-1	C	Q209	F-4	S	TP203	B-4	S
IC12	C-2	C	Q210	F-6	S	TP204	B-4	S
IC14	K-6	C	Q213	G-4	S	TP205	D-4	S
IC201	B-3	C	Q214	G-4	S	TP206	D-4	S
IC202	D-6	C	Q215	G-4	S	TP207	D-4	S
IC203	E-5	S	Q216	H-6	S	TP208	E-6	S
IC204	G-5	C	Q217	H-5	S	TP209	F-5	S
IC205	H-5	C	Q218	H-5	S	TP210	F-5	S
IC206	I-5	C	Q219	D-5	S	TP211	G-4	S
IC207	I-5	C	Q220	D-5	S	TP212	G-6	S
IC208	C-4	C	Q222	C-4	S	TP213	H-5	S
IC209	C-5	C	Q223	C-4	C			
IC210	C-6	C	Q224	C-5	S			
Q1	C-3	S	RV1	B-3	C			
Q2	C-2	S	RV2	C-2	C			
Q3	A-1	S	RV3	B-2	C			
Q4	A-1	S	RV4	C-3	C			
Q5	D-3	S	RV5	D-1	C			
Q6	D-2	S	RV6	D-1	C			
Q7	D-2	S	RV7	F-1	C			
Q8	E-1	S	RV12	J-1	C			
Q9	D-1	S	RV13	K-4	C			

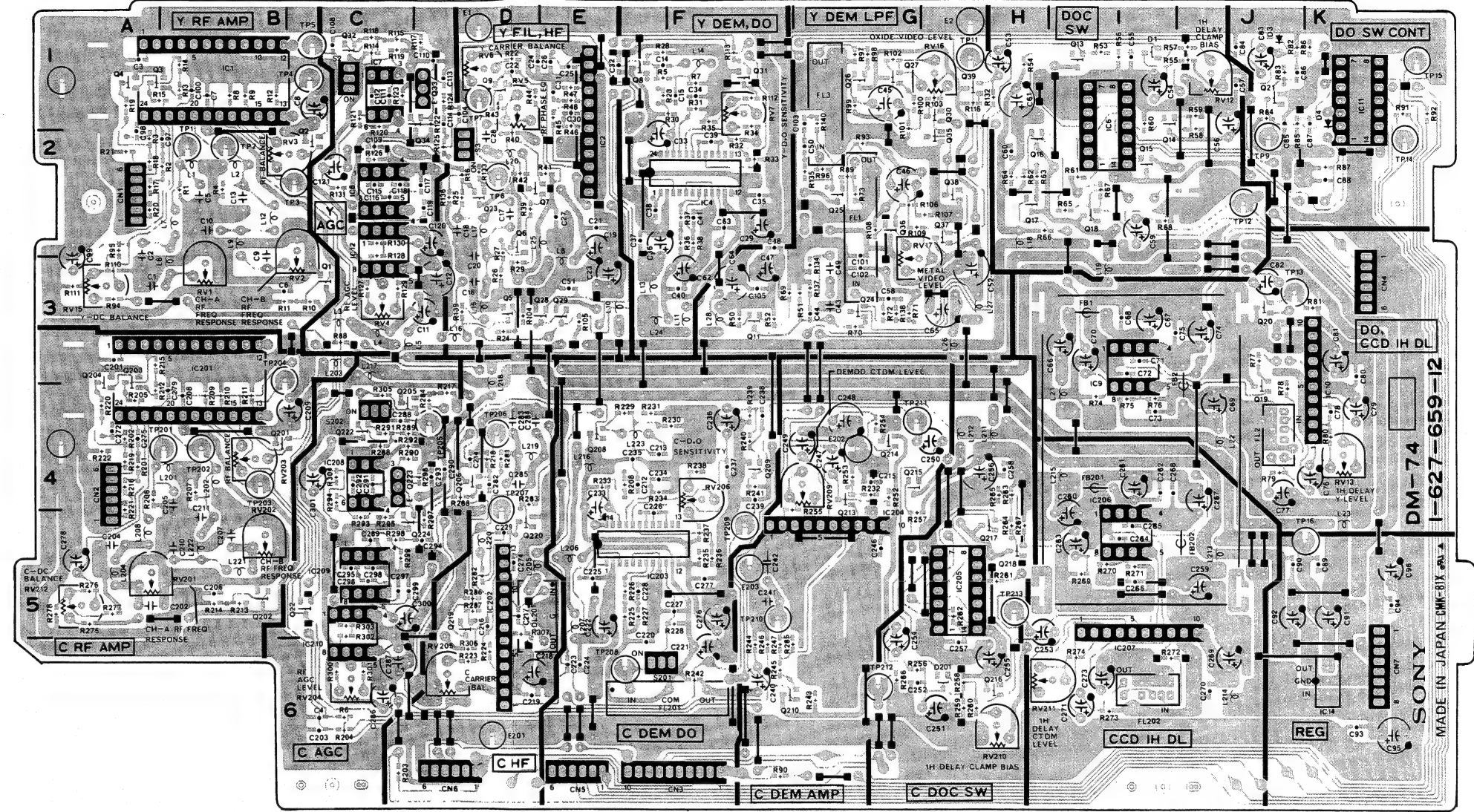
* * * C; COMPONENT SIDE
* * * S; SOLDERING SIDE



DM-74 — COMPONENT S
1-627-659-12(1)
BVW-22P



DM-74 — COMPONENT SIDE—
I-627-659-12(I)
BVW-22P

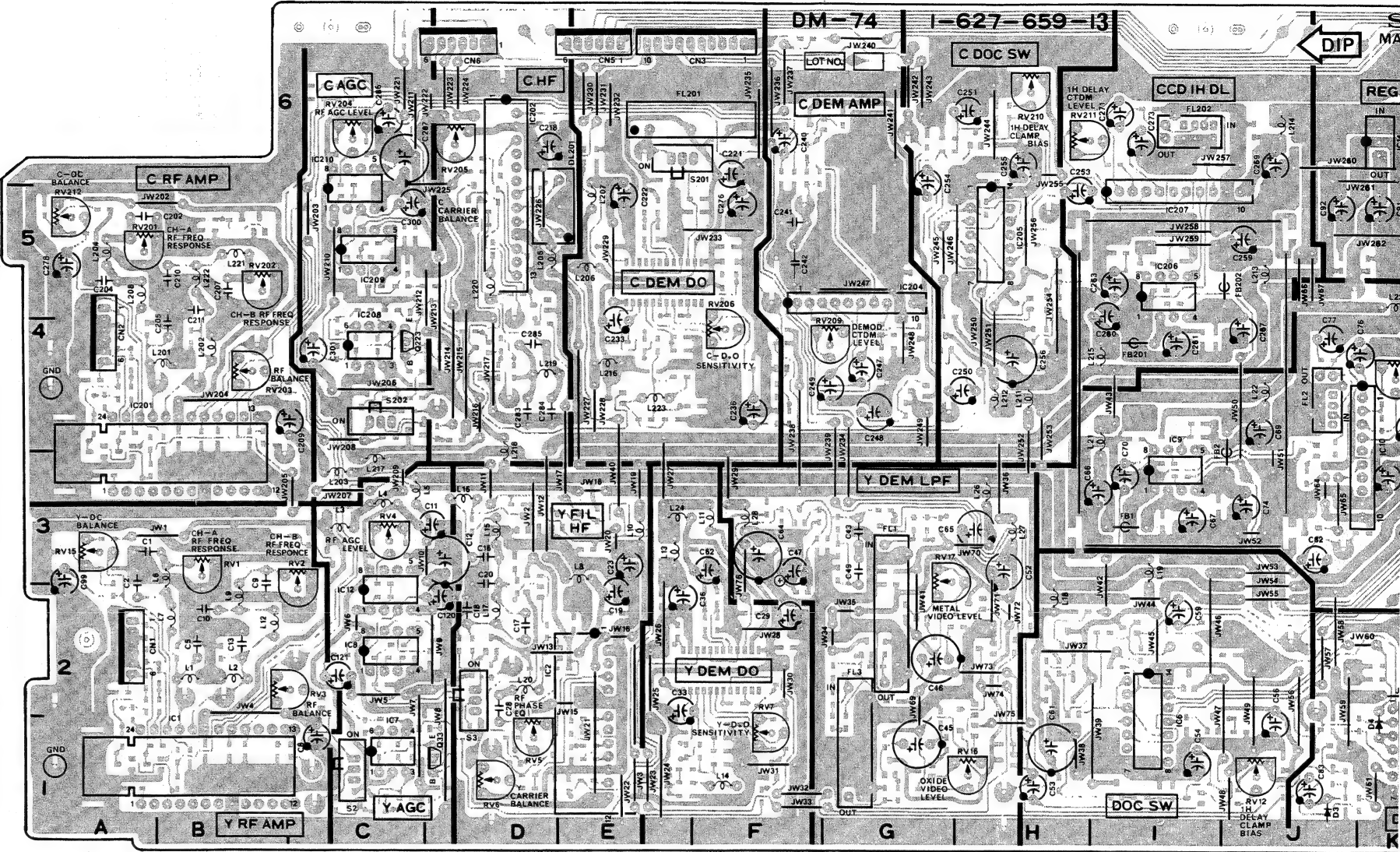


DM-74 — SOLDERING SIDE—
I-627-659-12(I)
BVW-22P

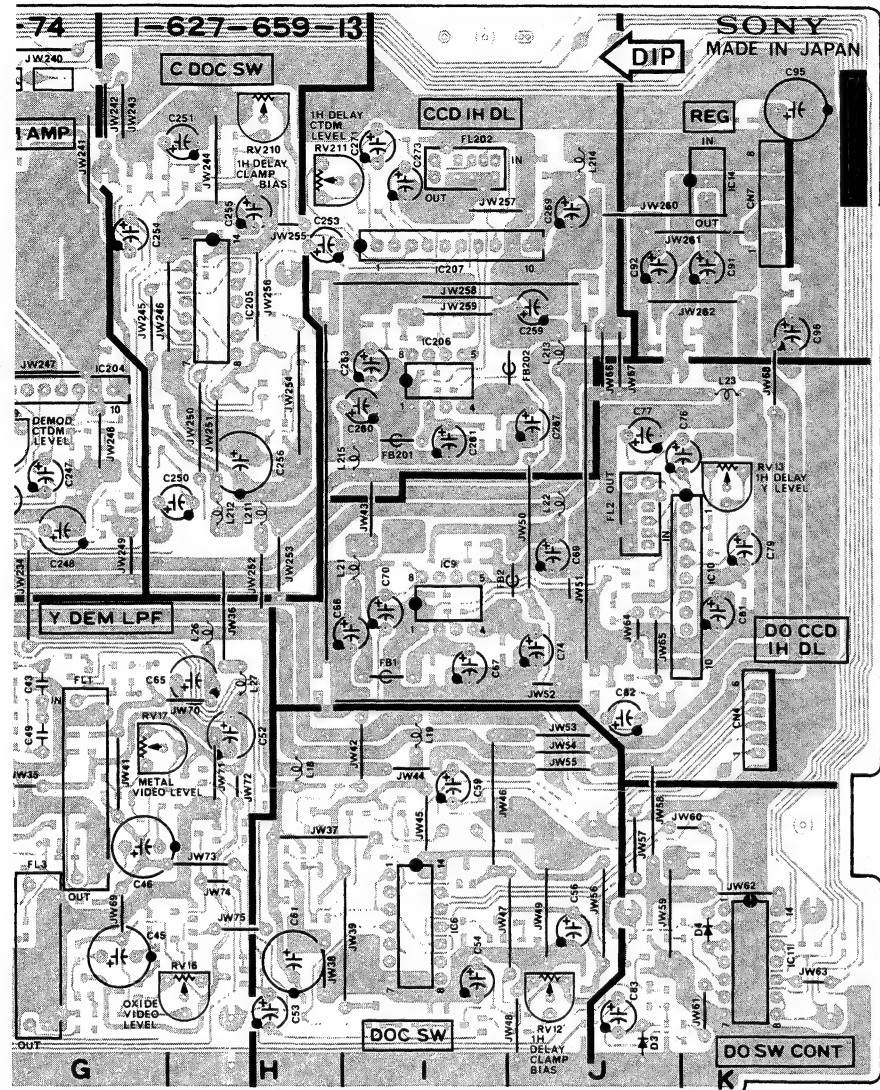
DM-74 (1-627-659-13)

CN1	A-2	C	Q5	D-3	S	RV2	C-2	C
CN2	A-4	C	Q6	D-2	S	RV3	C-2	C
CN3	F-6	C	Q7	D-2	S	RV4	C-3	C
CN4	K-3	C	Q8	E-1	S	RV5	D-1	C
CN5	E-6	C	Q9	D-1	S	RV6	D-1	C
CN6	D-6	C	Q11	F-3	S	RV7	F-1	C
CN7	K-6	C	Q13	I-1	S	RV12	J-1	C
			Q14	I-1	S	RV13	K-4	C
D1	I-1	S	Q15	I-2	S	RV15	A-3	C
D3	J-1	C	Q16	H-2	S	RV16	H-1	C
D4	K-1	C	Q17	H-2	S	RV17	G-3	C
D201	H-6	S	Q18	I-2	S	RV201	A-5	C
			Q19	J-4	S	RV202	B-5	C
DL201	D-5	C	Q20	J-3	S	RV203	B-4	C
			Q21	J-1	S	RV204	C-6	C
E1	D-1	S	Q22	C-5	S	RV205	D-6	C
E2	H-1	S	Q23	D-2	S	RV206	F-4	C
E4	A-2	S	Q24	G-3	S	RV209	G-4	C
E201	D-6	S	Q25	G-2	S	RV210	H-6	C
E202	G-4	S	Q26	G-1	S	RV211	H-6	C
E203	F-5	S	Q27	G-1	S	RV212	A-5	C
E204	A-4	S	Q28	E-3	S			
			Q29	E-3	S	S2	C-1	C
FL1	F-2	C	Q30	H-1	S	S3	D-2	C
FL2	J-4	C	Q31	F-1	S	S201	E-6	C
FL3	G-1	C	Q32	C-1	S	S202	C-4	C
FL201	F-6	C	Q33	D-1	C			
FL202	I-6	C	Q34	D-1	S	TP1	B-2	S
			Q35	H-2	S	TP2	B-2	S
IC1	B-1	C	Q36	G-2	S	TP3	C-2	S
IC2	E-2	C	Q37	H-2	S	TP4	C-1	S
IC4	F-2	S	Q38	H-2	S	TP5	C-1	S
IC6	I-2	C	Q39	H-1	S	TP6	D-2	S
IC7	C-1	C	Q201	B-4	S	TP7	D-1	S
IC8	C-2	C	Q202	B-5	S	TP9	J-2	S
IC9	I-3	C	Q203	A-3	S	TP11	H-1	S
IC10	K-4	C	Q204	A-3	S	TP12	J-2	S
IC11	K-1	C	Q205	C-4	S	TP13	J-3	S
IC12	C-2	C	Q206	D-4	S	TP14	K-2	S
IC14	K-6	C	Q208	E-4	S	TP15	K-1	S
IC201	A-4	C	Q209	F-4	S	TP16	J-5	S
IC202	D-6	C	Q210	F-6	S	TP201	B-4	S
IC203	E-5	S	Q213	G-4	S	TP202	B-4	S
IC204	G-5	C	Q214	G-4	S	TP203	B-4	S
IC205	H-5	C	Q215	G-4	S	TP204	B-3	S
IC206	I-5	C	Q216	H-6	S	TP205	D-4	S
IC207	I-5	C	Q217	H-5	S	TP206	D-4	S
IC208	C-4	C	Q218	H-5	S	TP207	D-4	S
IC209	C-5	C	Q219	D-5	S	TP208	E-6	S
IC210	C-5	C	Q220	D-5	S	TP209	F-5	S
			Q222	C-4	S	TP210	F-5	S
Q1	C-3	S	Q223	C-4	C	TP211	G-4	S
Q2	C-2	S	Q224	C-5	S	TP212	G-6	S
Q3	A-1	S				TP213	H-5	S
Q4	A-1	S	RV1	B-3	C			

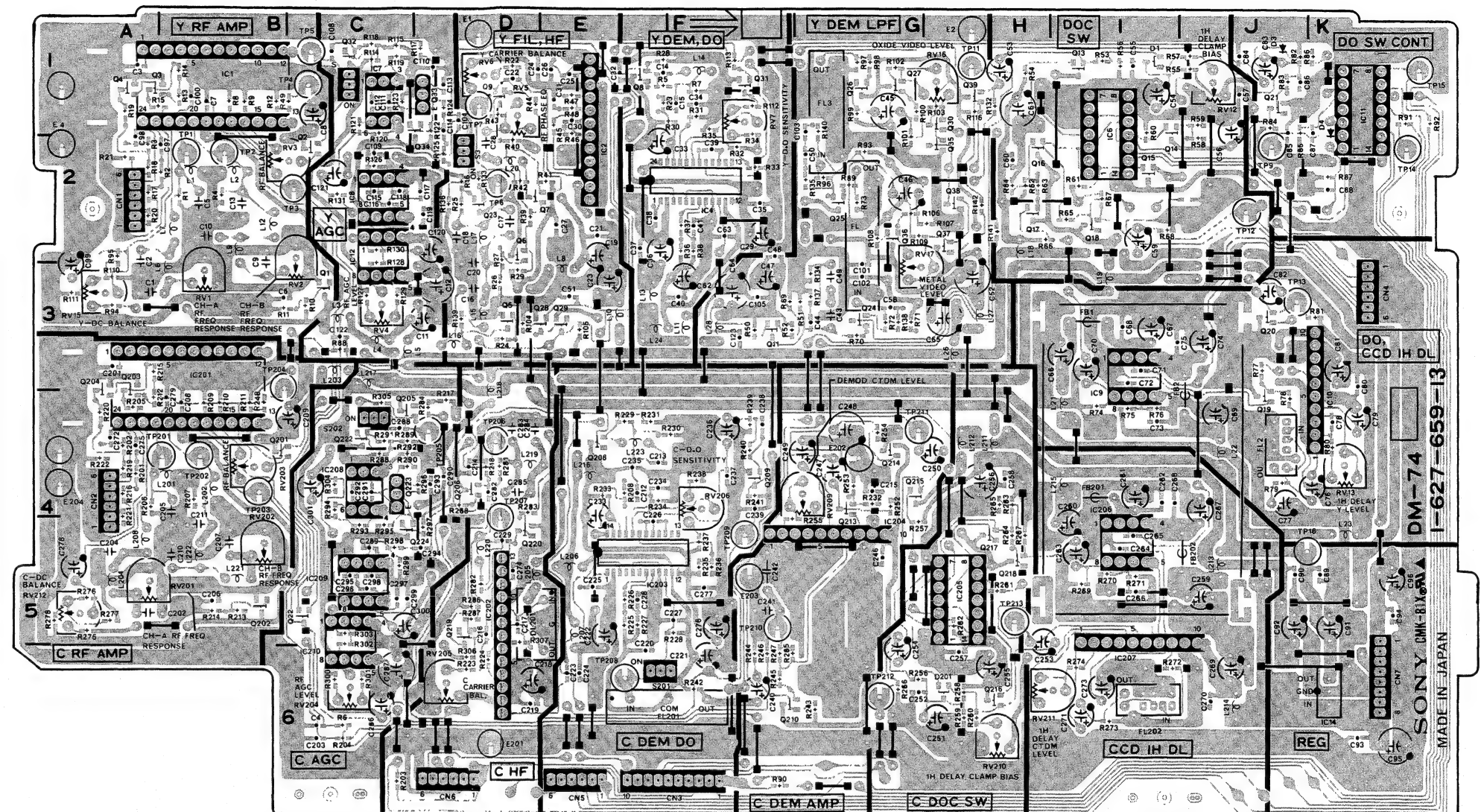
**- C; COMPONENT SIDE
**- S; SOLDERING SIDE



DM-74 -COMI
1-627-659-13(1)
BVW-22P



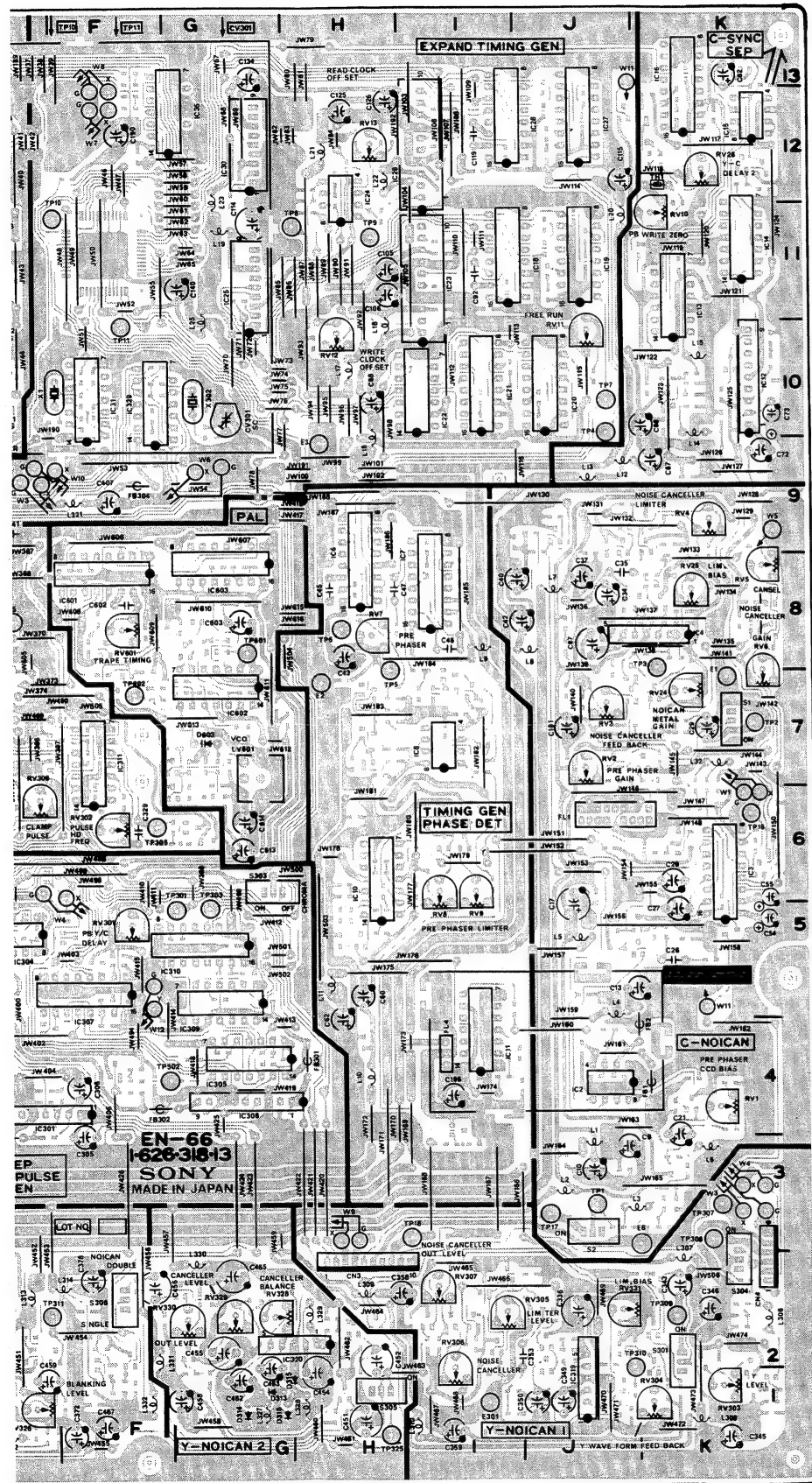
DM-74 —COMPONENT SIDE—
I-627-659-13(1)
BVW-22P



DM-74 —SOLDERING SIDE—
I-627-659-13(1)
BVW-22P

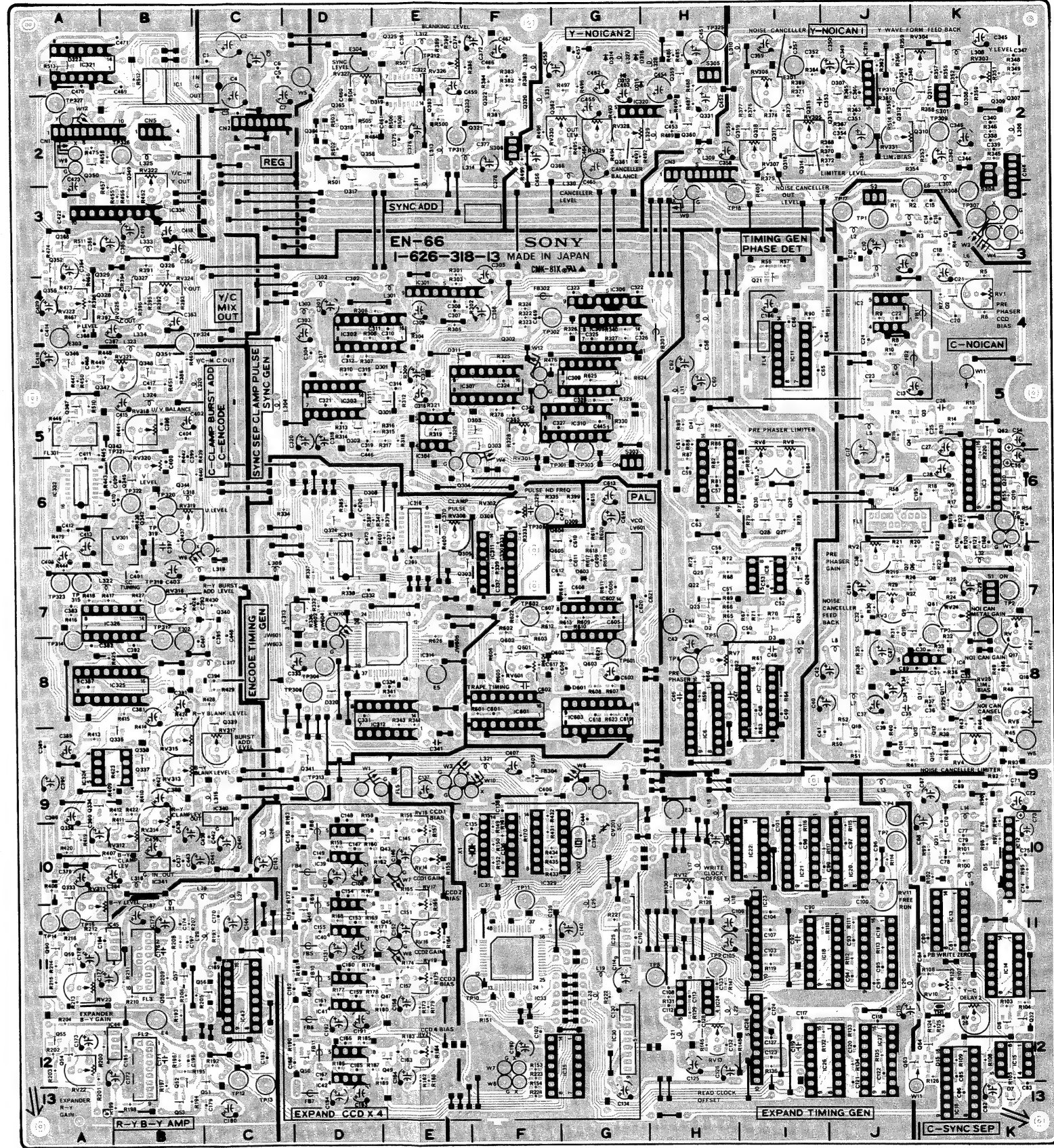
- C; COMPONENT SIDE
- S; SOLDERING SIDE





EN-66/A —COMPONENT SIDE—
 1-626-318-13(1)
 BVW-22
 BVW-22P

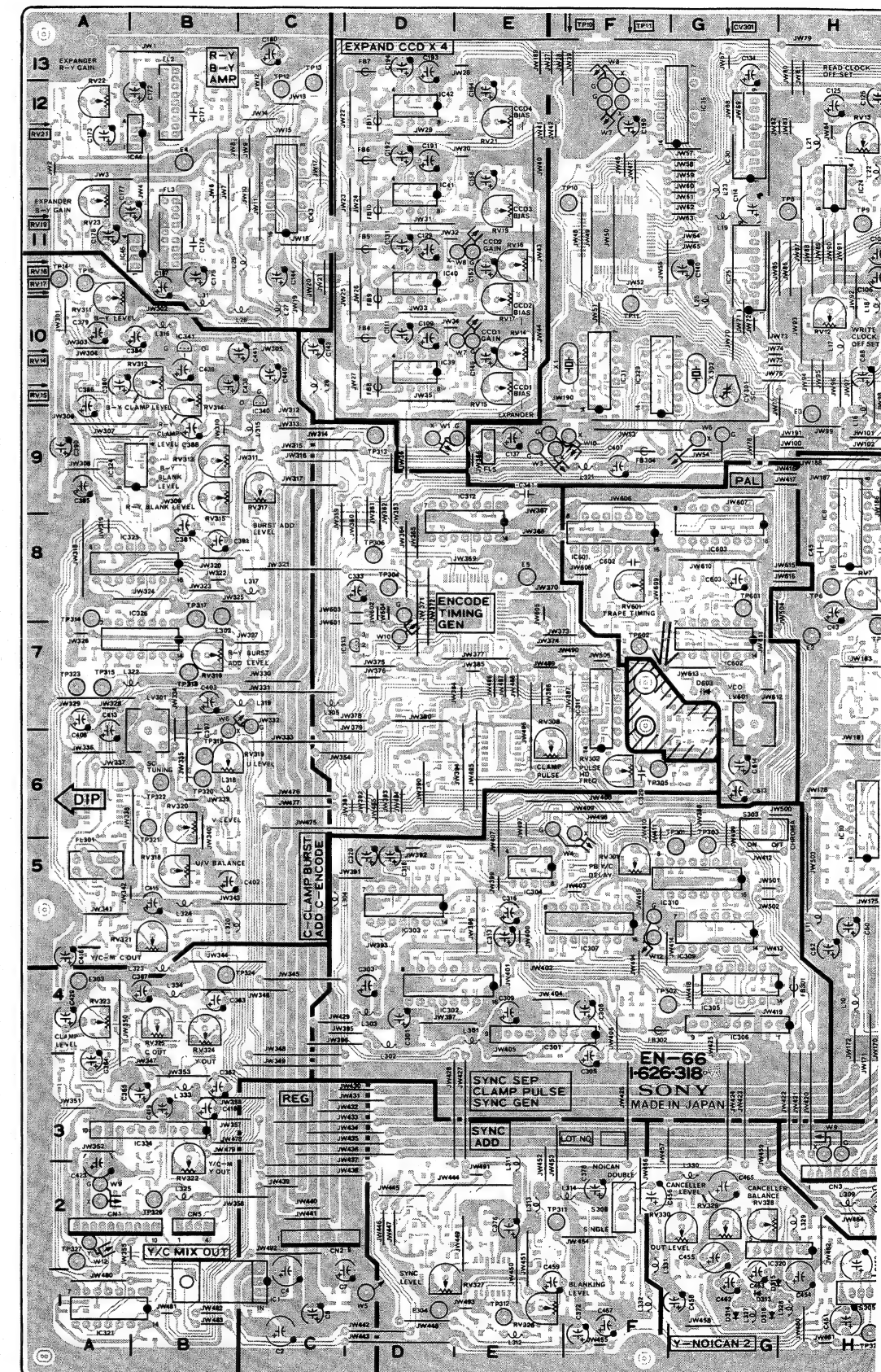
16-13 (a)



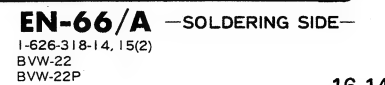
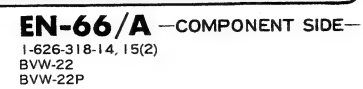
EN-66/A —SOLDERING SIDE—
 1-626-318-13(1)
 BVW-22
 BVW-22P

16-14 (a)

CN1	A-2	C	IC3	K-6	C	IC334	B-3	C	Q59	A-11	S	Q360	H-2	S	RV322	B-2	C	TP322	B-6	C
CN2	C-2	C	IC4	K-8	C	IC340	C-10	C	Q60	A-11	S	Q361	G-2	S	RV323	A-4	C	TP323	A-7	C
CN3	H-2	C	IC6	H-8	C	IC341	B-10	C	Q61	K-7	S	Q362	G-2	S	RV324	B-4	C	TP324	B-4	C
CN4	K-2	C	IC7	I-8	C	IC601	F-8	C	Q62	K-5	S	Q363	E-2	S	RV325	B-4	C	TP325	H-1	C
CN5	B-2	C	IC8	I-7	C	IC602	G-7	C	Q63	J-12	S	Q364	D-2	S	RV326	E-1	C	TP326	B-2	C
			IC10	H-6	C	IC603	G-8	C	Q64	K-12	S	Q365	D-2	S	RV327	D-1	C	TP327	A-2	C
CV301	G-10	C	IC11	I-4	C				Q301	E-5	S	Q366	G-2	S	RV328	G-2	C	TP601	G-8	C
			IC12	K-10	C	LV301	B-6	C	Q302	F-4	S	Q367	A-5	S	RV329	G-2	C	TP602	F-7	C
D1	K-8	S	IC13	K-11	C	LV601	G-7	C	Q303	F-7	S	Q368	A-3	S	RV330	G-2	C			
D2	H-7	S	IC14	K-11	C				Q304	E-6	S	Q601	F-8	S	RV331	J-2	C	X1	F-10	C
D3	I-7	S	IC15	K-12	C	Q1	K-3	S	Q305	F-7	S	Q602	F-7	S	RV601	F-8	C	X302	G-10	C
D4	H-5	S	IC16	K-13	C	Q2	K-4	S	Q307	K-1	S	Q603	G-8	S						
D5	K-10	S	IC18	I-11	C	Q3	J-5	S	Q308	K-2	S	Q604	G-6	S	S1	K-7	C	**	C; COMPONENT SIDE	
D6	K-12	S	IC19	J-11	C	Q4	J-5	S	Q309	K-2	S	Q605	G-7	S	S2	J-3	C	**	S; SOLDERING SIDE	
D7	K-13	S	IC20	J-10	C	Q5	K-6	S	Q310	K-2	S				S301	K-2	C			
D15	K-12	S	IC21	I-10	C	Q6	K-7	S	Q311	K-1	S	RV1	K-4	C	S303	G-6	C			
D301	E-5	S	IC22	I-10	C	Q7	J-7	S	Q312	J-2	S	RV2	J-7	C	S304	K-2	C			
D302	D-5	S	IC23	I-11	C	Q8	K-7	S	Q313	J-2	S	RV3	J-7	C	S305	H-1	C			
D303	F-5	S	IC24	H-12	C	Q9	J-7	S	Q314	I-2	S	RV4	K-9	C	S306	F-2	C			
D305	F-5	S	IC25	G-11	C	Q10	J-7	S	Q315	I-2	S	RV5	K-8	C						
D306	F-6	S	IC26	I-12	C	Q11	K-8	S	Q316	I-2	S	RV6	K-7	C	TP1	J-3	C			
D307	J-2	S	IC27	J-12	C	Q12	K-9	S	Q317	I-2	S	RV7	H-8	C	TP2	K-7	C			
D308	D-6	S	IC28	I-12	C	Q13	J-9	S	Q318	I-2	S	RV8	I-6	C	TP3	K-7	C			
D309	G-6	S	IC30	G-12	C	Q14	J-9	S	Q319	I-2	S	RV9	I-6	C	TP4	J-10	C			
D311	E-4	S	IC31	F-10	C	Q15	K-9	S	Q320	F-2	S	RV10	K-11	C	TP5	H-8	C			
D313	G-1	C	IC33	F-11	S	Q16	K-8	S	Q321	F-2	S	RV11	J-10	C	TP6	H-8	C			
D314	G-1	C	IC35	G-12	C	Q17	K-8	S	Q322	F-2	S	RV12	H-10	C	TP7	J-10	C			
D315	G-1	C	IC39	D-10	C	Q18	J-9	S	Q323	E-2	S	RV13	H-12	C	TP8	H-11	C			
D316	G-1	C	IC40	D-11	C	Q19	K-6	S	Q324	D-6	S	RV14	E-10	C	TP9	H-11	C			
D317	D-2	S	IC41	D-11	C	Q20	K-6	S												



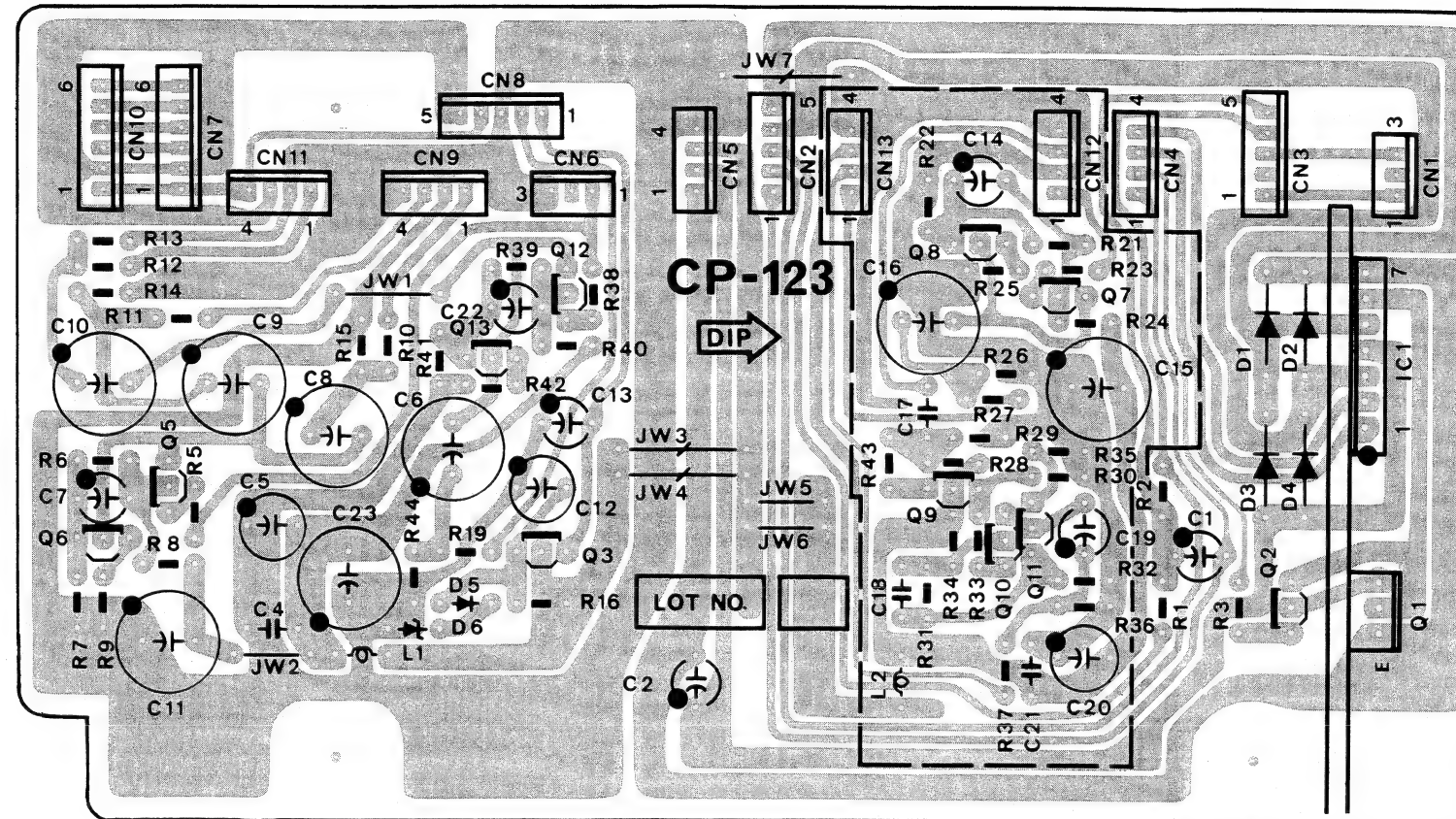
12(b)



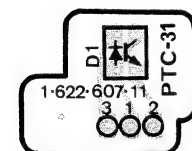
16-14(b)

CP-123; VIDEO OUTPUT AMPLIFIER
PTC-31; THREADING MOTOR FG DETECTOR

S/N UP TO 10188 (EK)

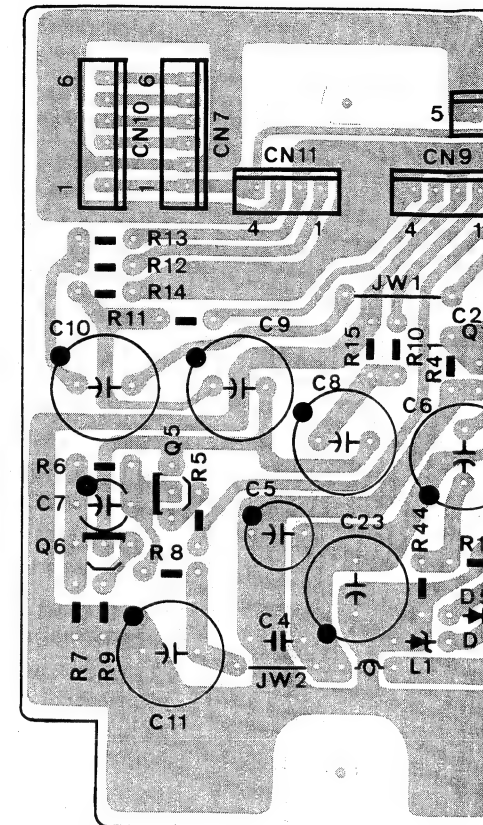


CP-123 —COMPONENT SIDE—
1-626-306-12(1)
BVW-22
BVW-22P



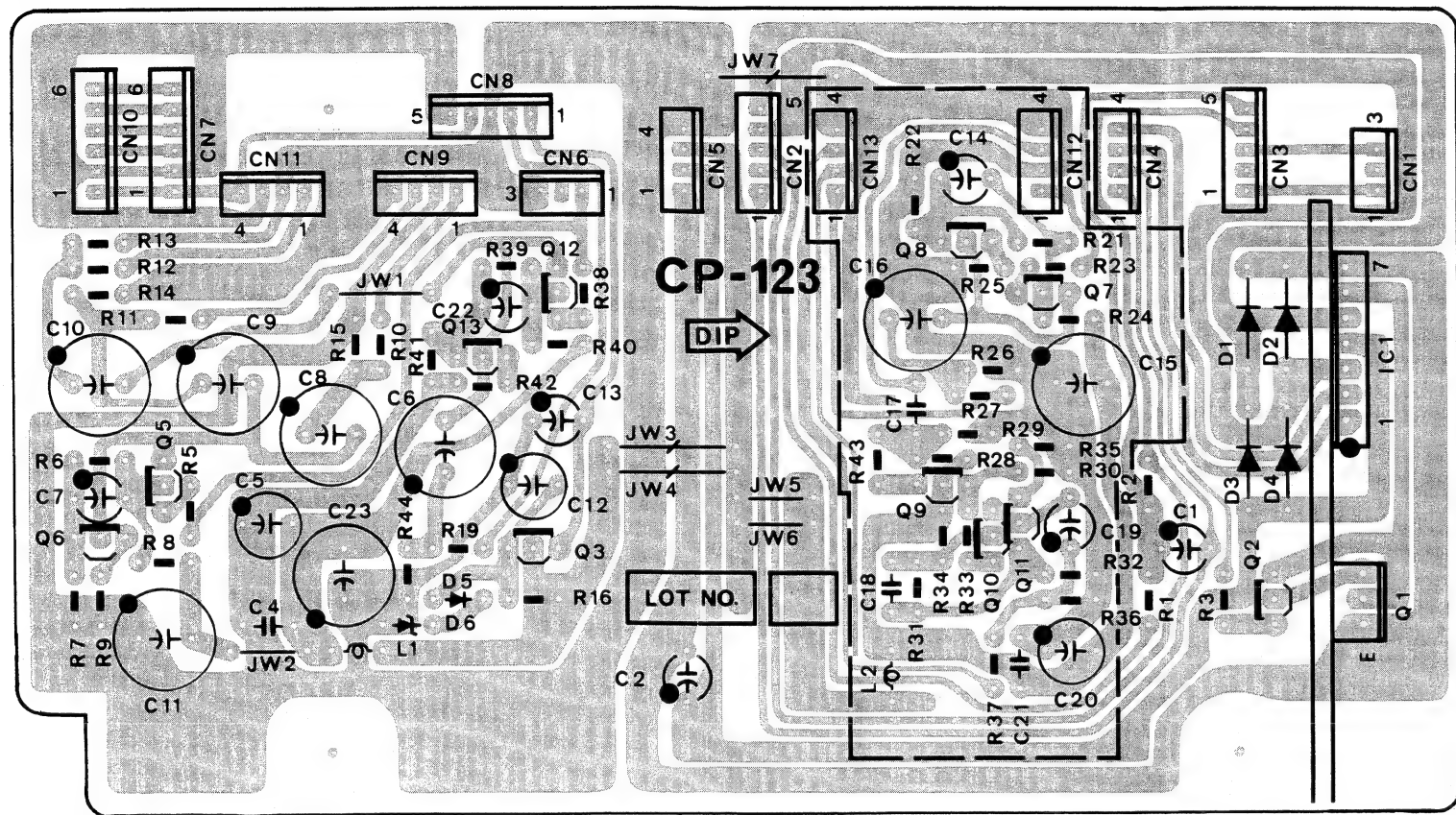
PTC-31 —COMPONENT SIDE—
1-622-607-11(1)
BVW-22
BVW-22P

S/N 10189 AND HIGHER (EK)



DEO OUTPUT AMPLIFIER
IREADING MOTOR FG DETECTOR

S/N UP TO 10188 (EK)

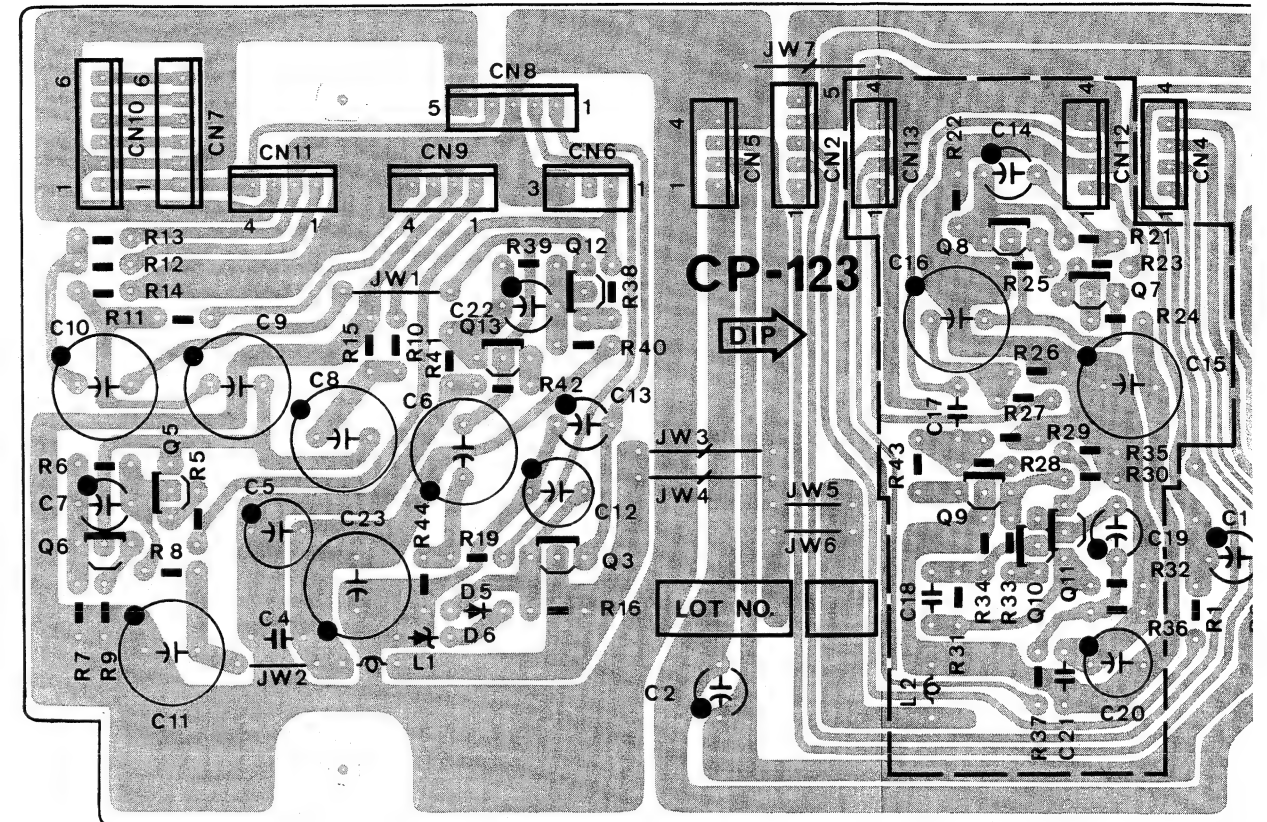


CP-123 —COMPONENT SIDE—
1-626-306-12(I)
BVW-22
BVW-22P



PTC-31 —COMPONENT SIDE—
1-622-607-11(I)
BVW-22
BVW-22P

S/N 10189 AND HIGHER (EK)



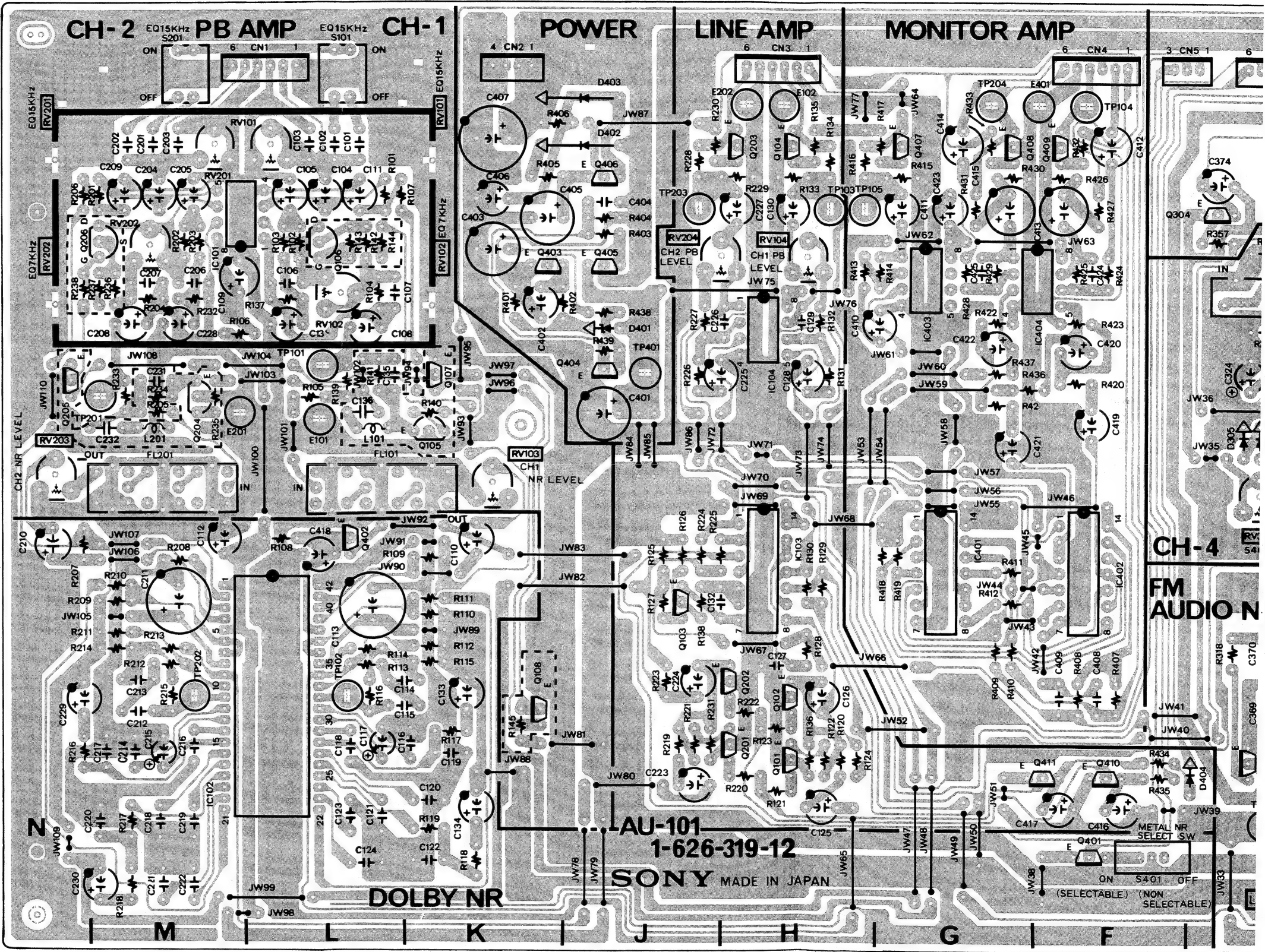
CP-1
1-626-30
BVW-22
BVW-22F

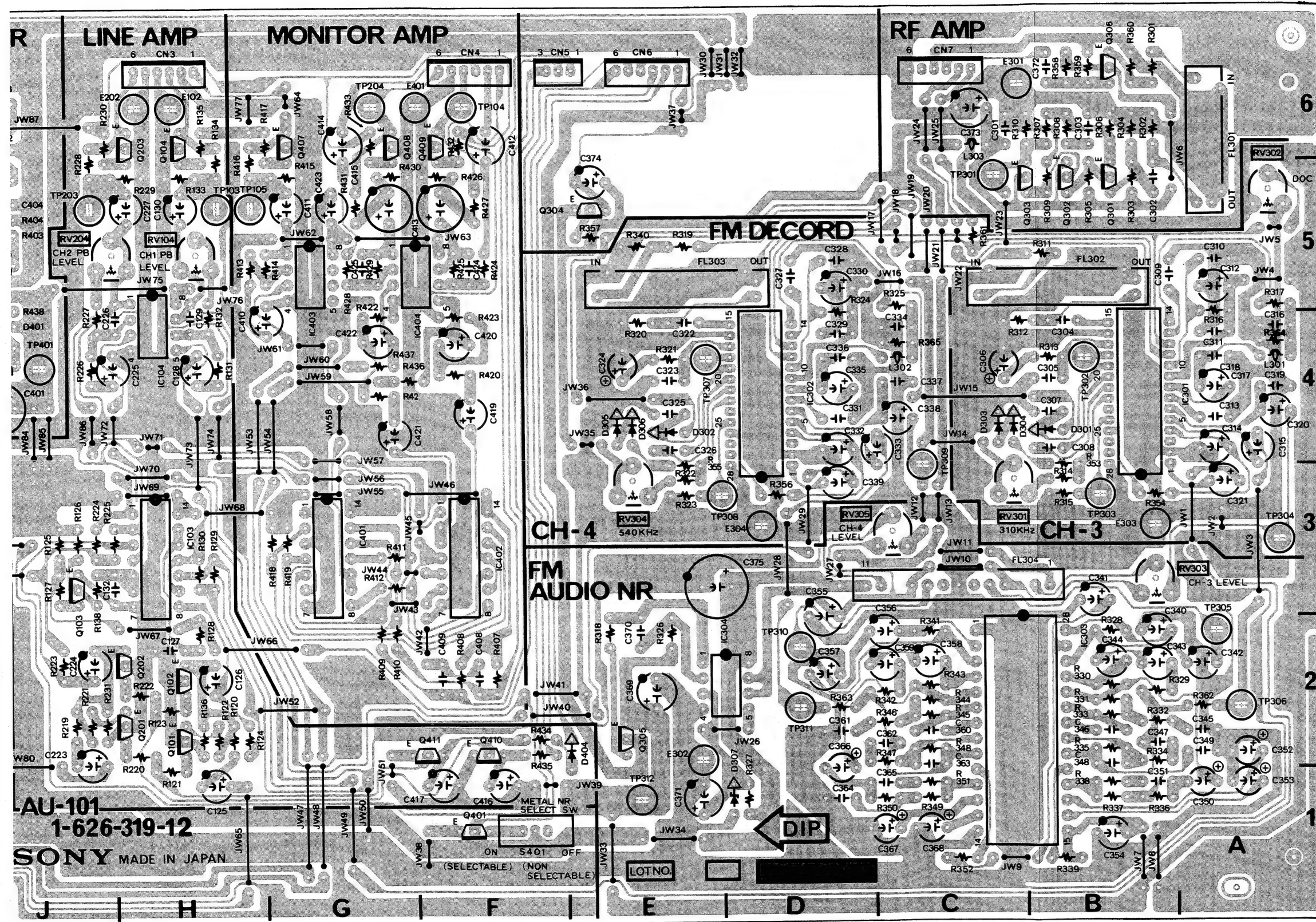
AU-101A; AUDIO PB AMPLIFIER
HP-38; HEADPHONES VOLUME/JACK

S/N UP TO 10188 (EK)

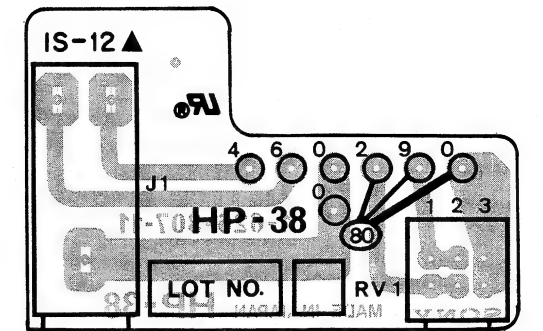
AU-101A(1-626-319-12)

CN1	L-6	Q201	H-2	TP308	D-3
CN2	K-6	Q202	H-2	TP309	C-4
CN3	H-6	Q203	H-6	TP310	D-2
CN4	F-6	Q204	M-4	TP311	D-2
CN5	F-6	Q205	N-4	TP312	E-1
CN6	E-6	Q206	M-5	TP401	J-4
CN7	C-6	Q301	B-5		
		Q302	B-5		
D301	B-4	Q303	B-5		
D302	E-4	Q304	E-5		
D303	C-4	Q305	E-2		
D304	C-4	Q306	B-6		
D305	E-4	Q401	F-1		
D306	E-4	Q402	L-3		
D307	D-1	Q403	K-5		
D401	J-4	Q404	J-4		
D402	J-6	Q405	J-5		
D403	J-6	Q406	J-5		
D404	E-2	Q407	G-6		
		Q408	G-6		
E101	L-4	Q409	F-6		
E102	H-6	Q410	F-2		
E201	M-4	Q411	F-2		
E202	H-6				
E301	C-6	RV101	L-6		
E302	E-2	RV102	L-5		
E303	B-3	RV103	K-3		
E304	D-3	RV104	H-5		
E401	F-6	RV201	M-6		
		RV202	M-5		
FL101	L-3	RV203	N-4		
FL201	M-3	RV204	H-5		
FL301	A-6	RV301	C-3		
FL302	B-5	RV302	A-5		
FL303	E-5	RV303	B-3		
FL304	C-3	RV304	E-3		
		RV305	C-3		
IC101	M-5				
IC102	L-2	S101	L-6		
IC103	H-3	S201	M-6		
IC104	H-4	S401	F-1		
IC301	B-4				
IC302	D-4	TP101	L-4		
IC303	B-2	TP102	L-2		
IC304	E-2	TP103	H-5		
IC401	G-3	TP104	F-6		
IC402	F-3	TP105	H-5		
IC403	G-5	TP201	M-4		
IC404	G-5	TP202	M-2		
		TP203	J-5		
		TP204	G-6		
Q101	H-2	TP301	C-5		
Q102	H-2	TP302	B-4		
Q103	J-3	TP303	B-3		
Q104	H-6	TP304	A-3		
Q105	K-4	TP305	A-2		
Q106	L-5	TP306	A-2		
Q107	K-4	TP307	E-4		
Q108	K-2				





AU-101/A —COMPONENT SIDE—
1-626-319-12(1)
BVW-22
BVW-22P



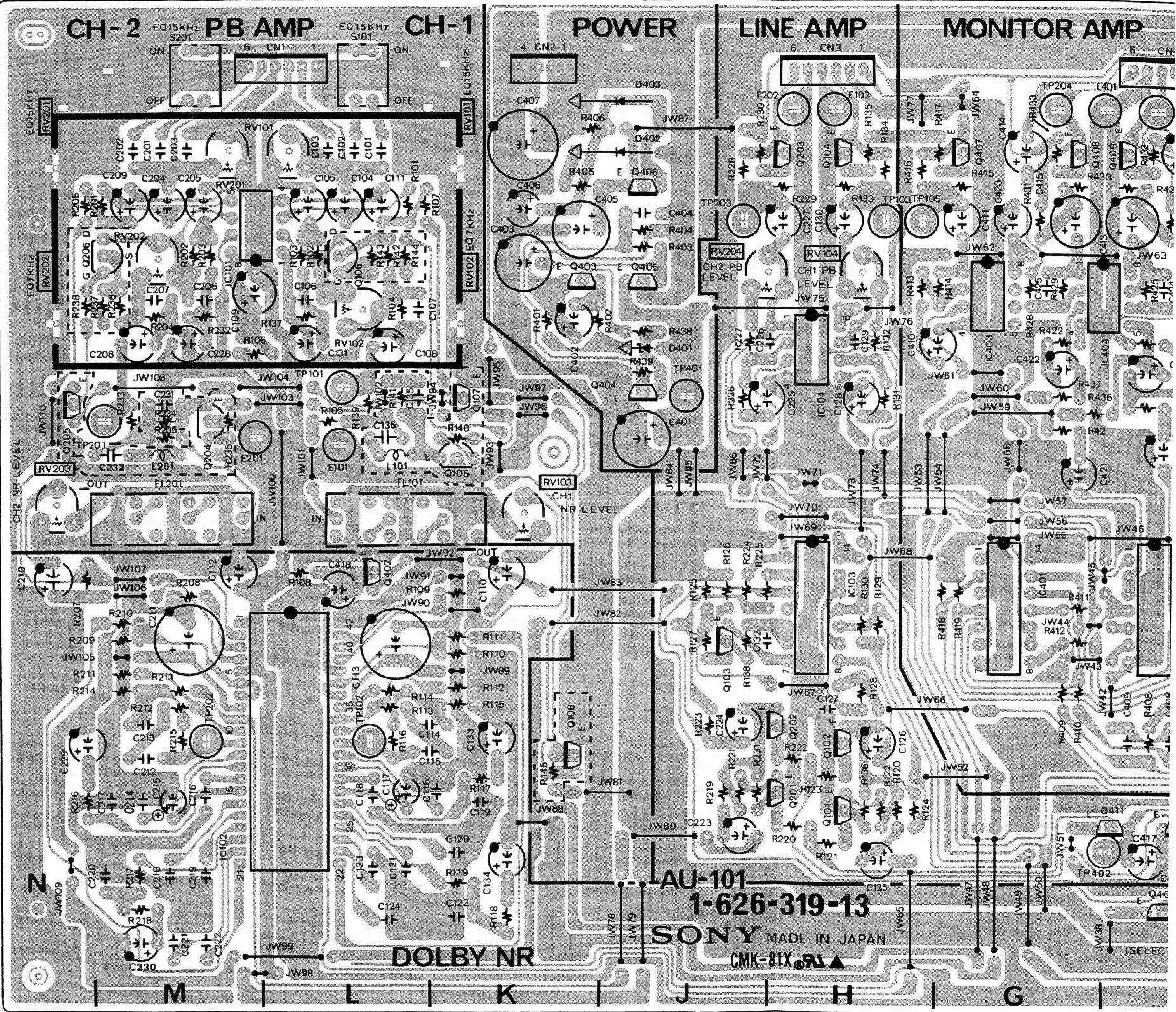
HP-38 —COMPONENT SIDE—
1-626-307-11(1)
BVW-22
BVW-22P

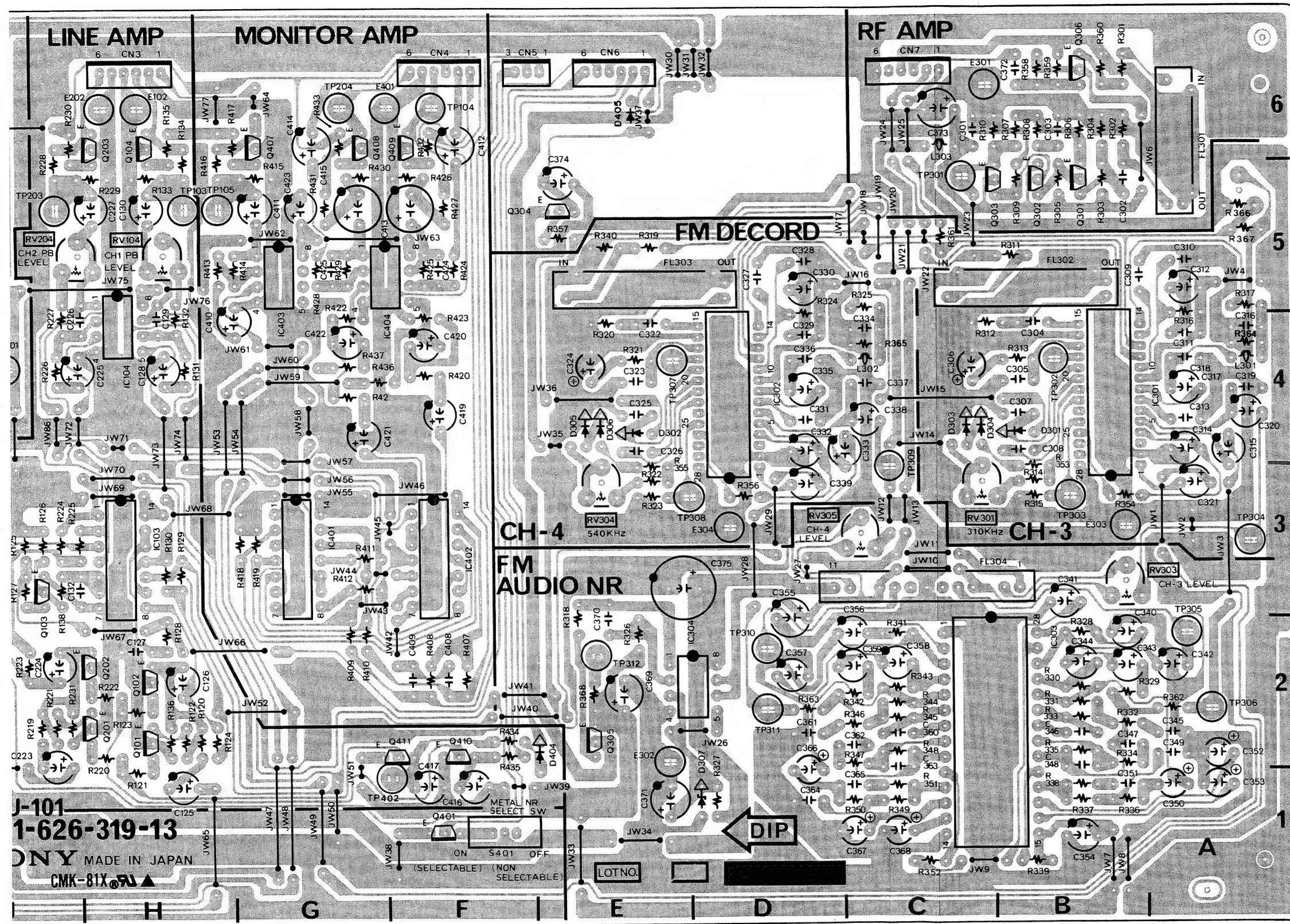
AU-101A; AUDIO PB AMPLIFIER
HP-38; HEADPHONES VOLUME/JACK

S/N 10189 AND HIGHER (EK)

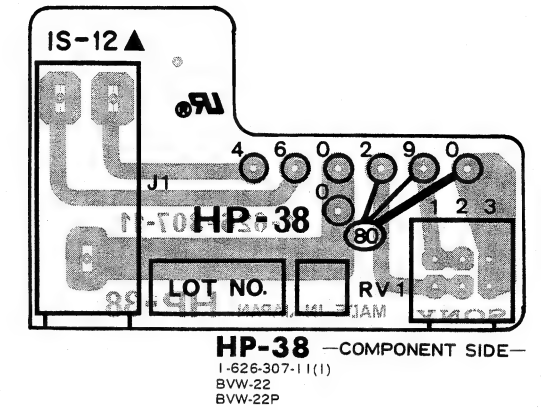
AU-101A(1-626-319-13)

CN1	L-6	Q201	H-2	TP309	C-4
CN2	K-6	Q202	H-2	TP310	D-2
CN3	H-6	Q203	H-6	TP311	D-2
CN4	F-6	Q204	M-4	TP312	E-2
CN5	F-6	Q205	N-4	TP401	J-4
CN6	E-6	Q206	M-5	TP402	F-1
CN7	C-6	Q301	B-5		
		Q302	B-5		
D301	B-4	Q303	B-5		
D302	E-4	Q304	E-5		
D303	C-4	Q305	E-2		
D304	C-4	Q306	B-6		
D305	E-4	Q401	F-1		
D306	E-4	Q402	L-3		
D307	D-1	Q403	K-5		
D401	J-4	Q404	J-4		
D402	J-6	Q405	J-5		
D403	J-6	Q406	J-5		
D404	E-2	Q407	G-6		
		Q408	G-6		
E101	L-4	Q409	F-6		
E102	H-6	Q410	F-2		
E201	M-4	Q411	F-2		
E202	H-6				
E301	C-6	RV101	L-6		
E302	E-2	RV102	L-5		
E303	B-3	RV103	K-3		
E304	D-3	RV104	H-5		
E401	F-6	RV201	M-6		
		RV202	M-5		
FL101	L-3	RV203	N-3		
FL201	M-3	RV204	H-5		
FL301	A-6	RV301	C-3		
FL302	B-5	RV303	B-3		
FL303	E-5	RV304	E-3		
FL304	C-3	RV305	C-3		
IC101	M-5	S101	L-6		
IC102	L-2	S201	M-6		
IC103	H-3	S401	F-1		
IC104	H-4				
IC301	B-4	TP101	L-4		
IC302	D-4	TP102	L-2		
IC303	B-2	TP103	H-5		
IC304	E-2	TP104	F-6		
IC401	G-3	TP105	H-5		
IC402	F-3	TP201	M-4		
IC403	G-5	TP202	M-2		
IC404	G-5	TP203	J-5		
		TP204	G-6		
Q101	H-2	TP301	C-5		
Q102	H-2	TP302	B-4		
Q103	J-3	TP303	B-3		
Q104	H-6	TP304	A-3		
Q105	K-4	TP305	A-2		
Q106	L-5	TP306	A-2		
Q107	K-4	TP307	E-4		
Q108	K-2	TP308	D-3		



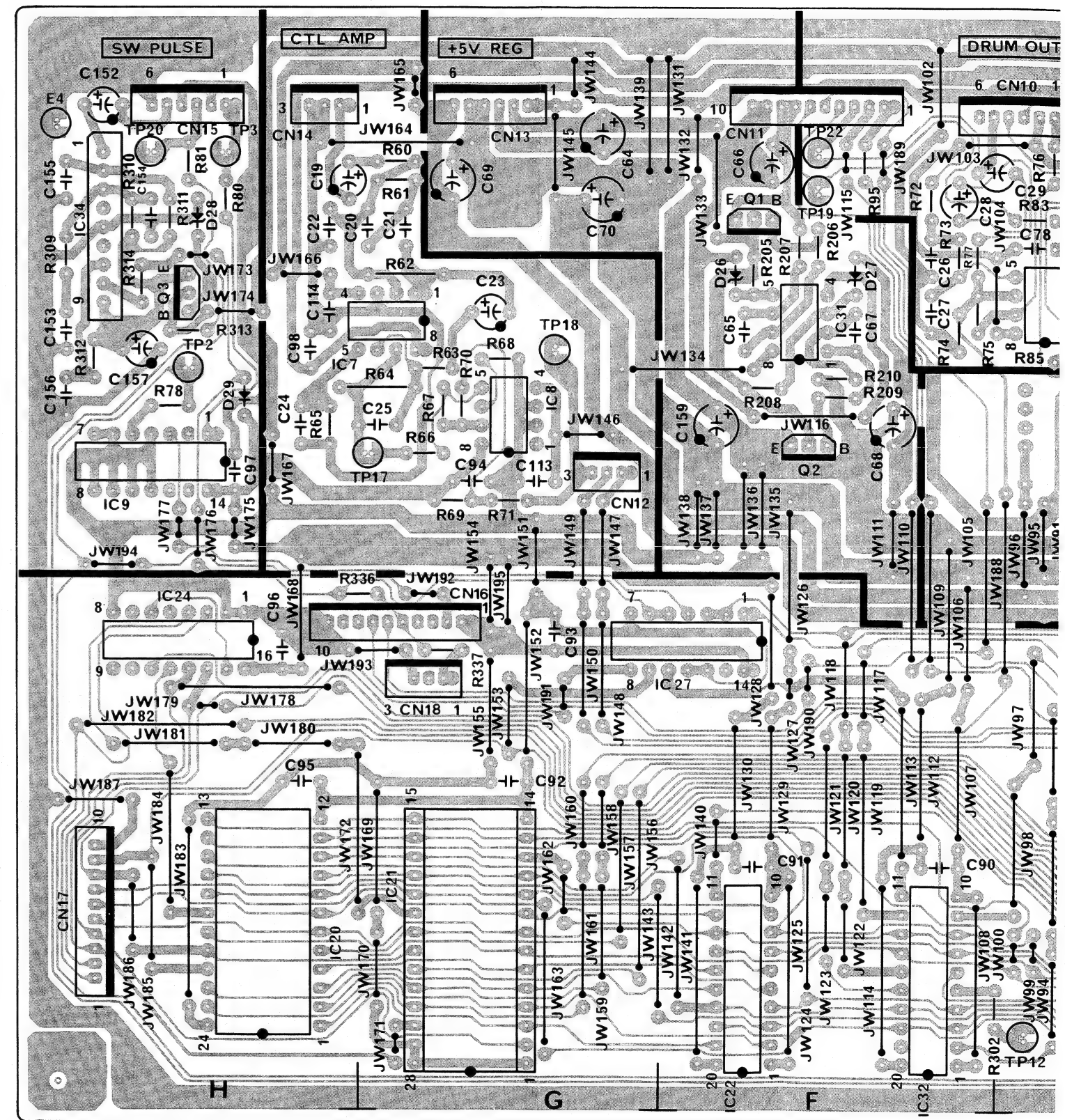


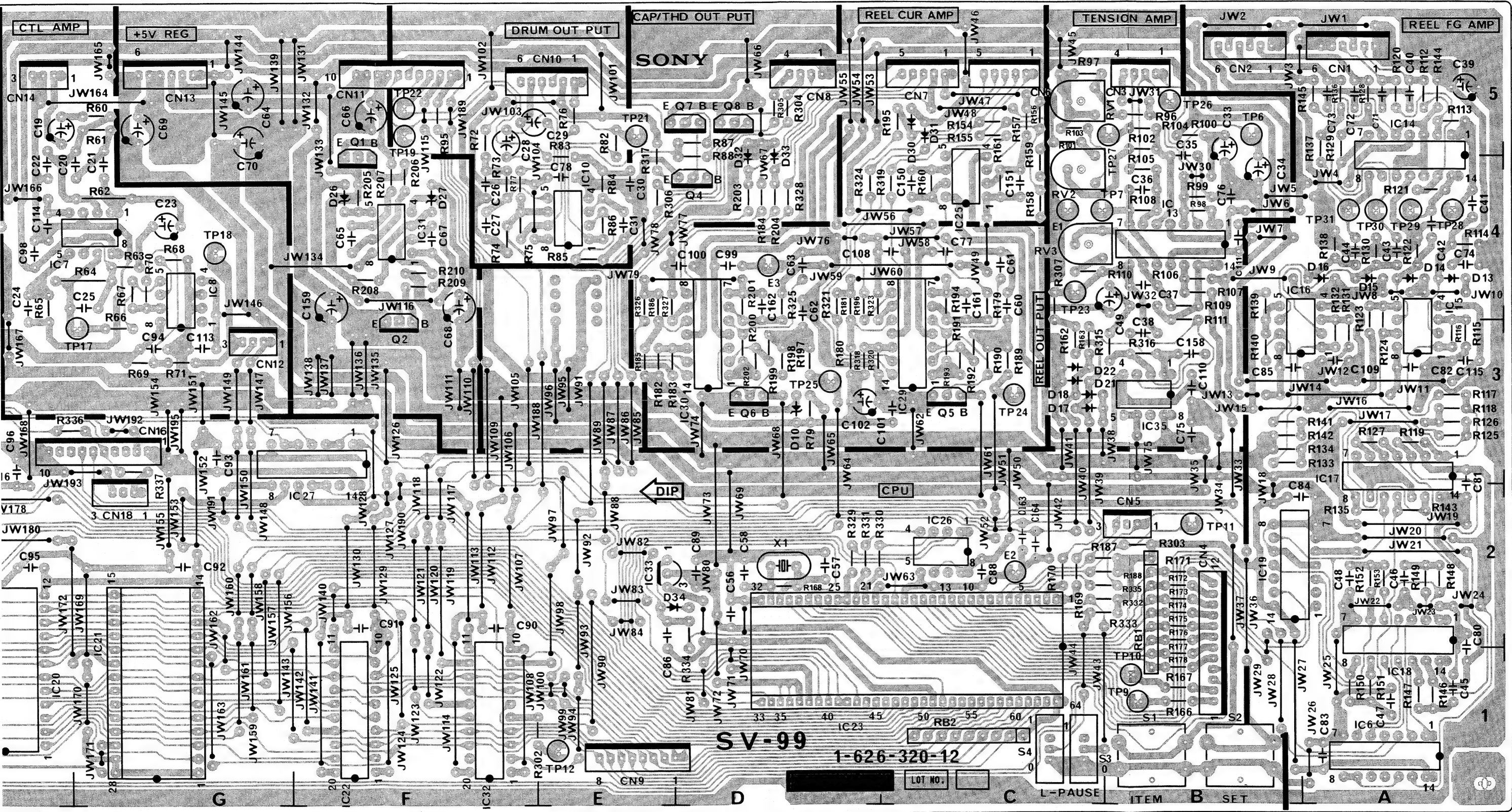
AU-101/A —COMPONENT SIDE—
 1-626-319-13(1)
 BVW-22
 BVW-22P



SV-99(1-626-320-12)

CN1	A-5	IC23	C-1	X1	D-2
CN2	B-5	IC24	H-3		
CN3	B-5	IC25	C-4		
CN4	B-2	IC26	C-2		
CN5	B-2	IC27	F-3		
CN6	C-5	IC29	C-3		
CN7	C-5	IC30	D-3		
CN8	D-5	IC31	F-4		
CN9	E-1	IC32	F-1		
CN10	E-5	IC33	E-2		
CN11	F-5	IC34	H-5		
CN12	G-3	IC35	B-3		
CN13	G-5				
CN14	H-5	Q1	F-5		
CN15	H-5	Q2	F-3		
CN16	G-3	Q3	H-4		
CN17	H-1	Q4	D-4		
CN18	G-2	Q5	C-3		
		Q6	D-3		
D10	D-3	Q7	D-5		
D13	A-4	Q8	D-5		
D14	A-4				
D15	A-4	RB1	B-2		
D16	A-4	RB2	C-1		
D17	C-3				
D18	C-3	RV1	C-5		
D21	C-3	RV2	C-4		
D22	C-3	RV3	C-4		
D26	F-4				
D27	F-4	S1	B-1		
D28	H-5	S2	B-1		
D29	H-4	S3	C-1		
D30	C-5	S4	C-1		
D31	C-5				
D32	D-5	TP2	H-4		
D33	D-5	TP3	H-5		
D34	E-2	TP6	B-5		
		TP7	B-4		
E1	C-4	TP9	B-1		
E2	C-2	TP10	B-1		
E3	D-4	TP11	B-2		
E4	H-5	TP12	E-1		
		TP17	G-3		
		TP18	G-4		
IC6	A-1	TP19	F-5		
IC7	G-4	TP20	H-5		
IC8	G-4	TP21	E-5		
IC9	H-3	TP22	F-5		
IC10	E-4	TP23	C-4		
IC13	B-4	TP24	C-3		
IC14	A-5	TP25	D-3		
IC15	A-4	TP26	B-5		
IC16	B-4	TP27	B-5		
IC17	A-3	TP28	A-4		
IC18	A-2	TP29	A-4		
IC19	B-2	TP30	A-4		
IC20	H-1	TP31	A-4		
IC21	G-1				
IC22	F-1				

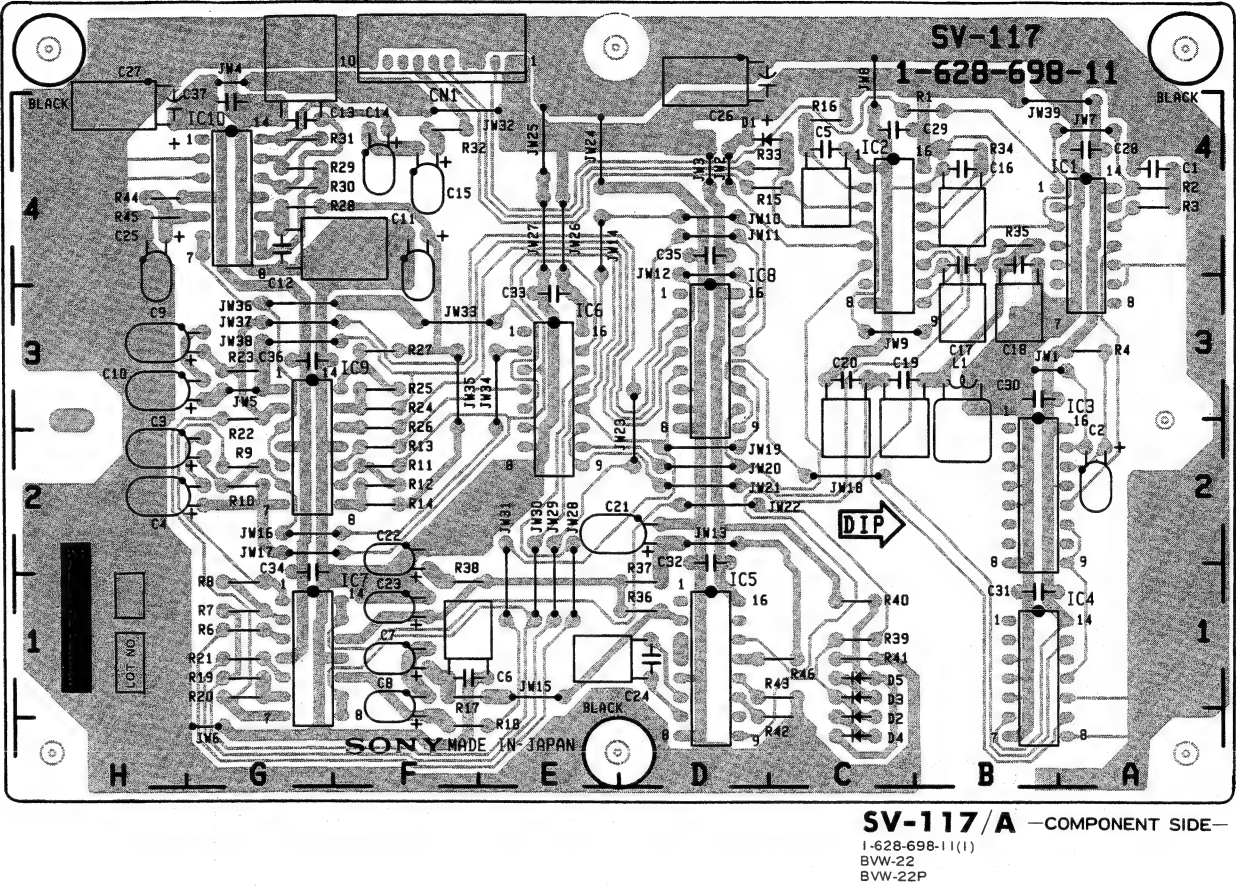




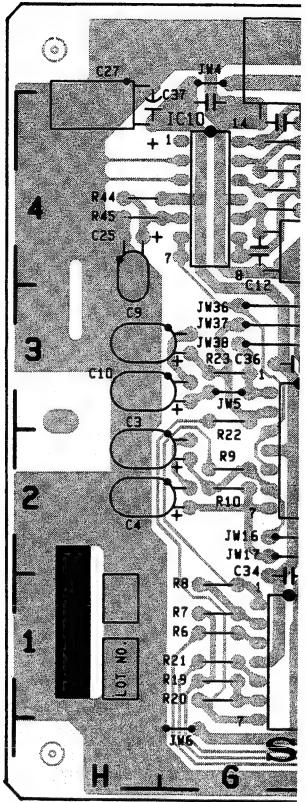
SV-99 — COMPONENT SIDE—
1-626-320-12(I)
BVW-22
BVW-22P

SV-117A; PICTURE SPLITTING COMPENSATOR

S/N UP TO 10188 (EK)

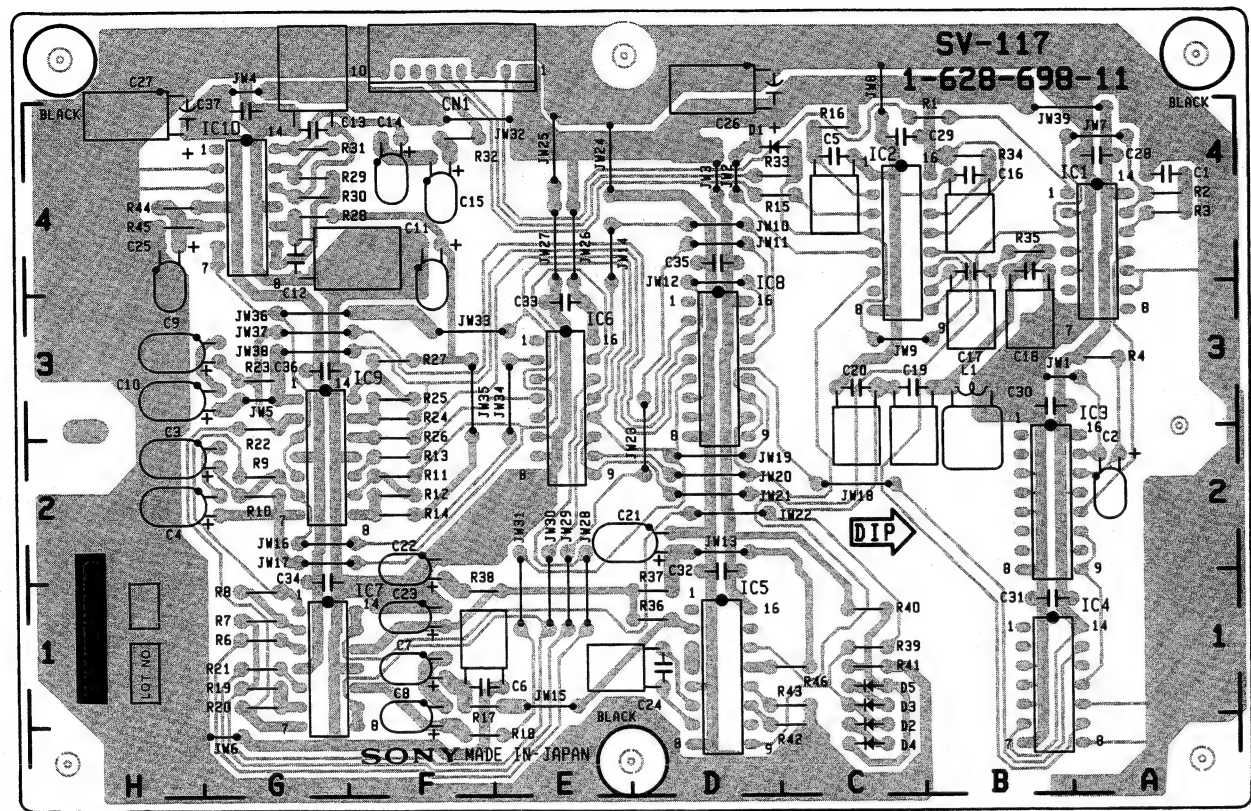


S/N 10189 AND H



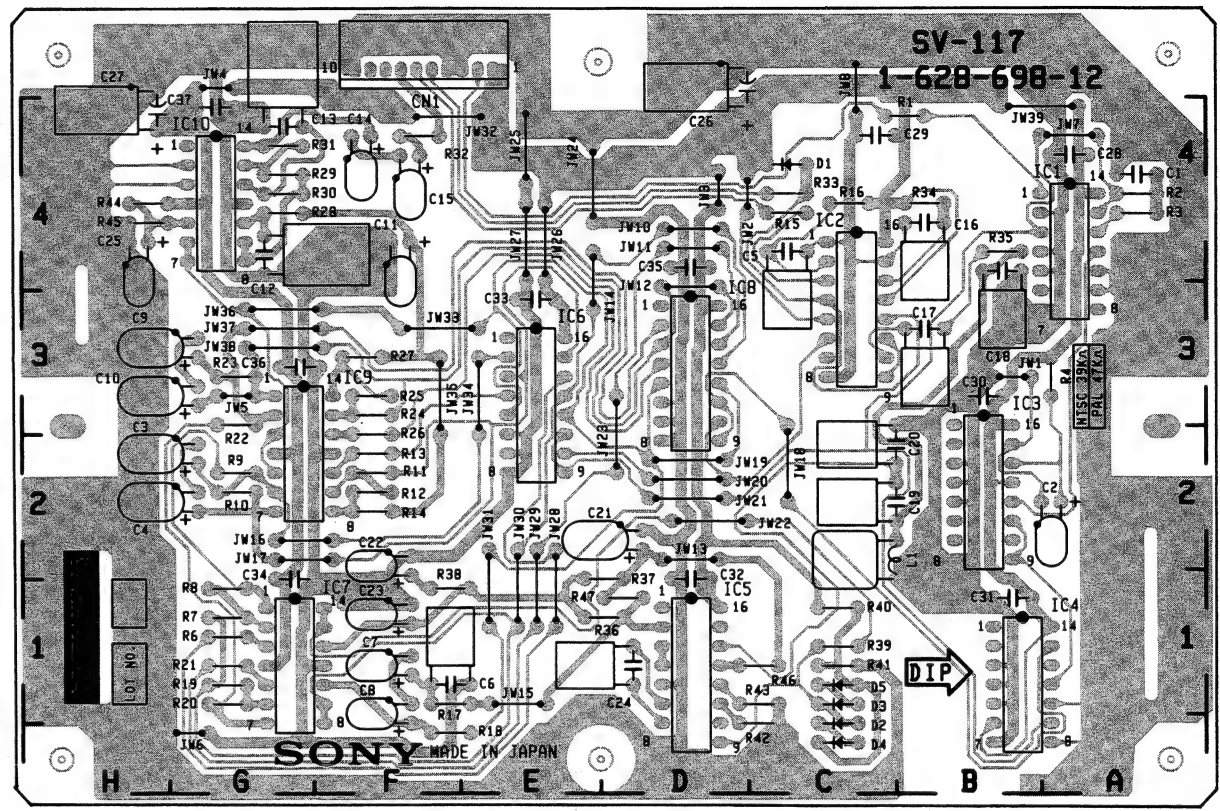
SV-117A; PICTURE SPLITTING COMPENSATOR

S/N UP TO 10188 (EK)



SV-117/A —COMPONENT SIDE—
1-628-698-11(1)
BVW-22
BVW-22P

S/N 10189 AND HIGHER (EK)



SV-117/A —COMPONENT SIDE—
1-628-698-12(1)
BVW-22
BVW-22P

DUS-174; REEL MOTOR DRIVER
DUS-175; REEL MOTOR DRIVER
SVD-2; DRUM/CAPSTAN MOTOR DRIVER

SVD-2(1-626-314-12)

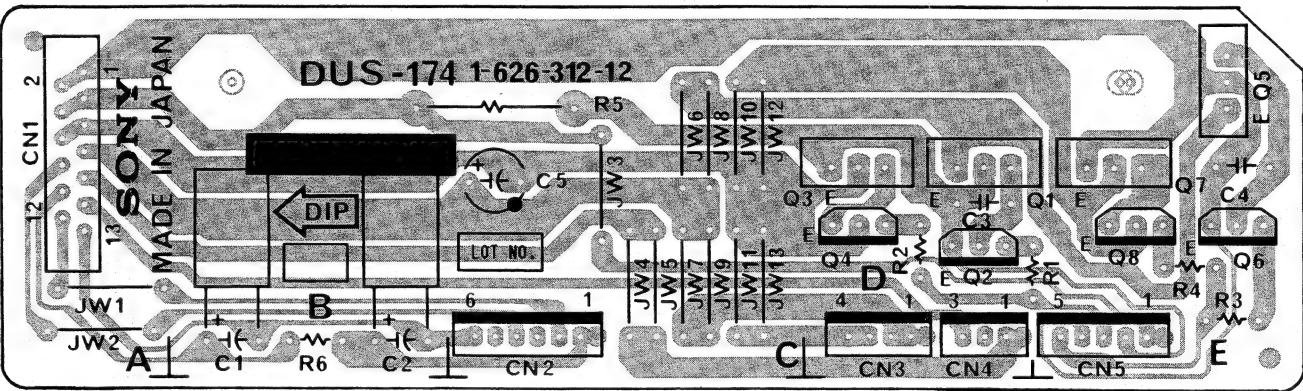
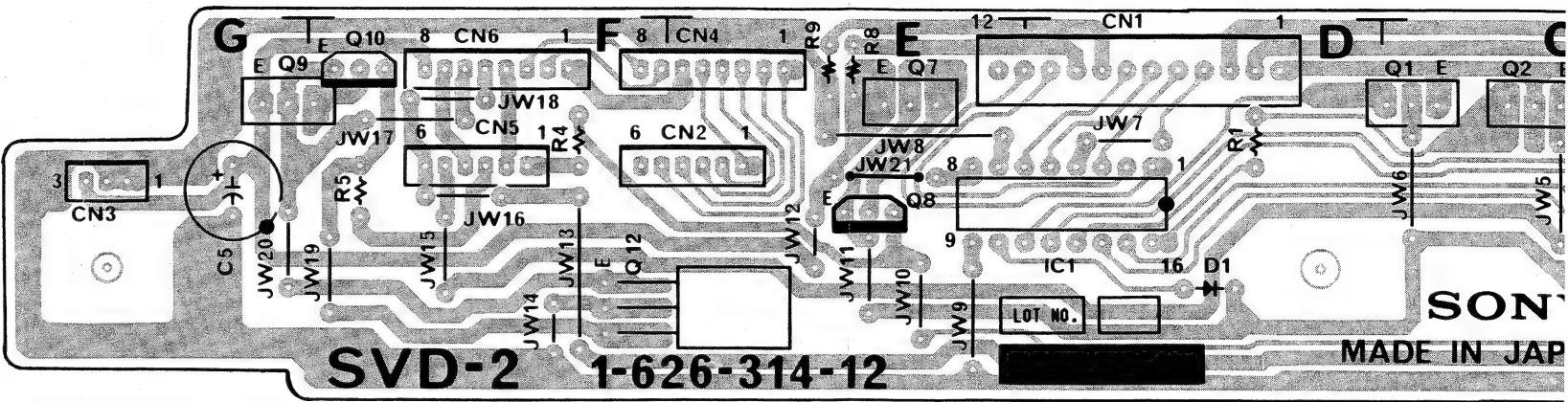
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CN2	E-1
CN3	G-1
CN4	E-1
CN5	F-1
CN6	F-1
CN7	A-1
CN8	A-1
D1	D-2
IC1	D-2
Q1	C-1
Q2	C-1
Q3	C-1
Q4	B-1
Q5	B-1
Q6	B-1
Q7	E-1
Q8	E-1
Q9	G-1
Q10	F-1
Q11	B-2
Q12	E-2

DUS-174(1-626-312-12)

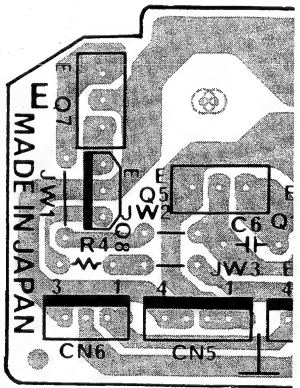
CN1	A-1
CN2	C-1
CN3	D-1
CN4	D-1
CN5	E-1
Q1	D-1
Q2	D-1
Q3	D-1
Q4	D-1
Q5	E-1
Q6	E-1
Q7	E-1
Q8	E-1

DUS-175(1-626-313-12)

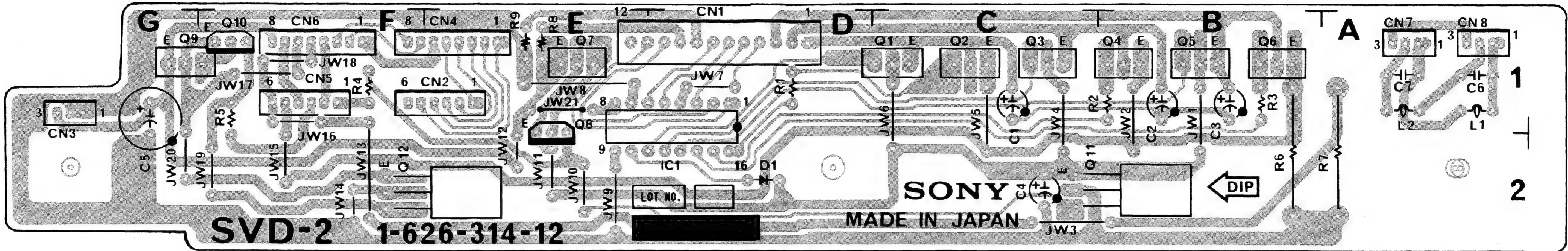
CN1	A-1
CN2	C-1
CN3	D-1
CN4	D-1
CN5	E-1
CN6	E-1
Q1	D-1
Q2	C-1
Q3	D-1
Q4	C-1
Q5	E-1
Q6	D-1
Q7	E-1
Q8	E-1



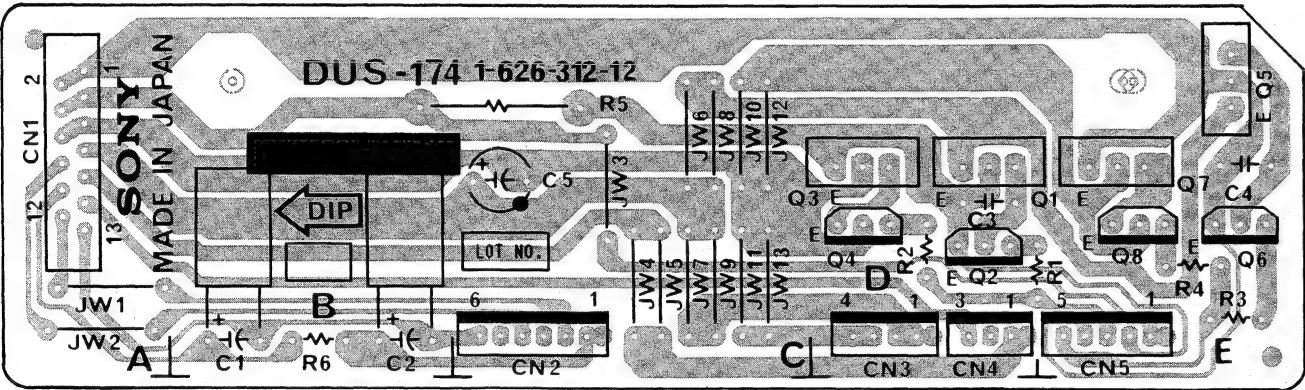
DUS-174 — COMPONENT SIDE—
1-626-312-12(1)
BVW-22
BVW-22P



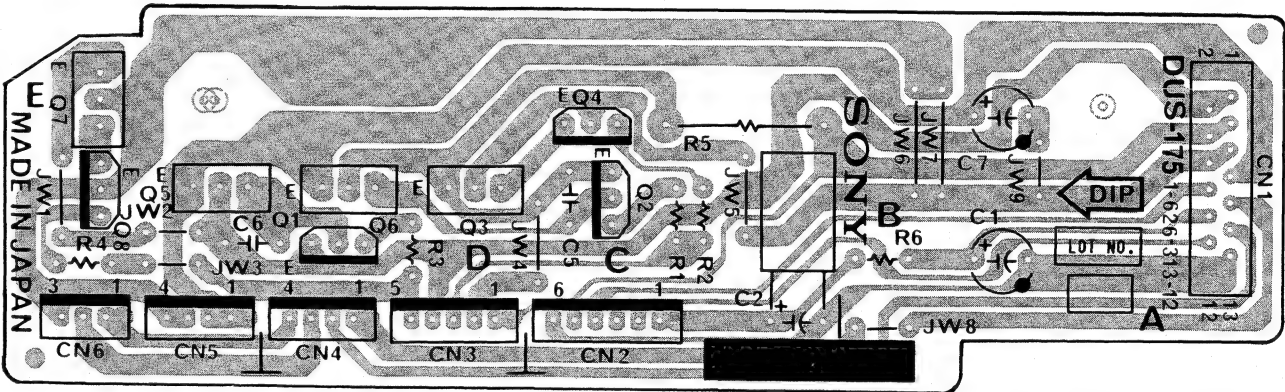
DUS-174; REEL MOTOR DRIVER
DUS-175; REEL MOTOR DRIVER
SVD-2; DRUM/CAPSTAN MOTOR DRIVER



SVD-2 —COMPONENT SIDE—
1-626-314-12(1)
BVW-22
BVW-22P



DUS-174 —COMPONENT SIDE—
1-626-312-12(1)
BVW-22
BVW-22P



DUS-175 —COMPONENT SIDE—
1-626-313-12(1)
BVW-22
BVW-22P

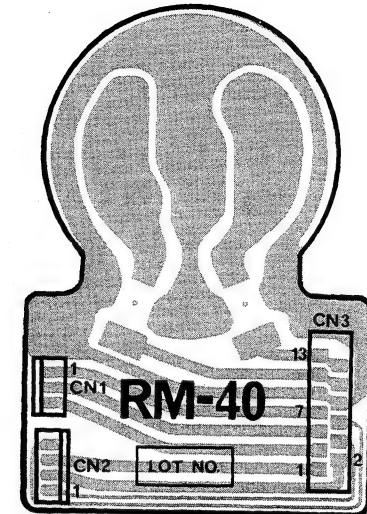
DE-15, RM-40, TR-18

DE-15, RM-40, TR-18

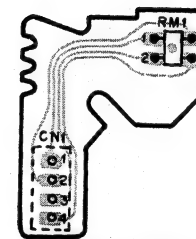
DE-15; REEL FG
RM-40; RELAY BOARD FOR REEL MOTOR & BRAKE SOLENOID
TR-18; TAPE TENSION SENSOR



DE-15 —COMPONENT SIDE—
1-622-606-12(1)
BVW-22
BVW-22P



RM-40 —COMPONENT SIDE—
1-622-605-12(1)
BVW-22
BVW-22P



TR-18 —COMPONENT SIDE—
1-611-279-13(1)
BVW-22
BVW-22P

KY-130, DP-87, SW-274, LED-58

KY-130, DP-87, SW-274, LED-58

KY-130; FUNCTION KEY/DISPLAY
DP-87; TIME COUNTER DISPLAY
SW-274; DOLBY NR/SUPERIMPOSE SWITCH
LED-58; AUTO OFF DISPLAY

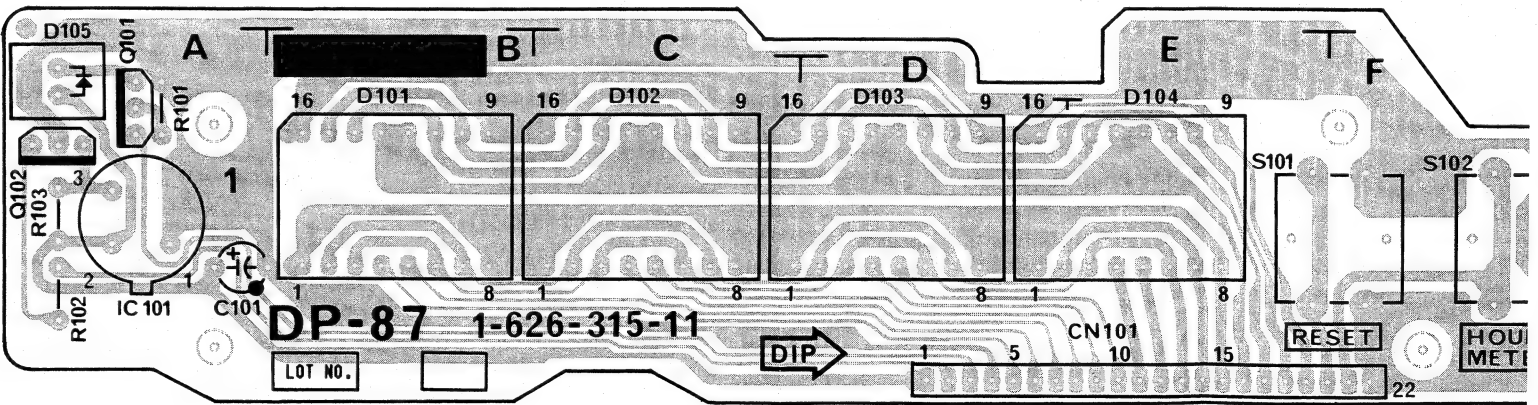
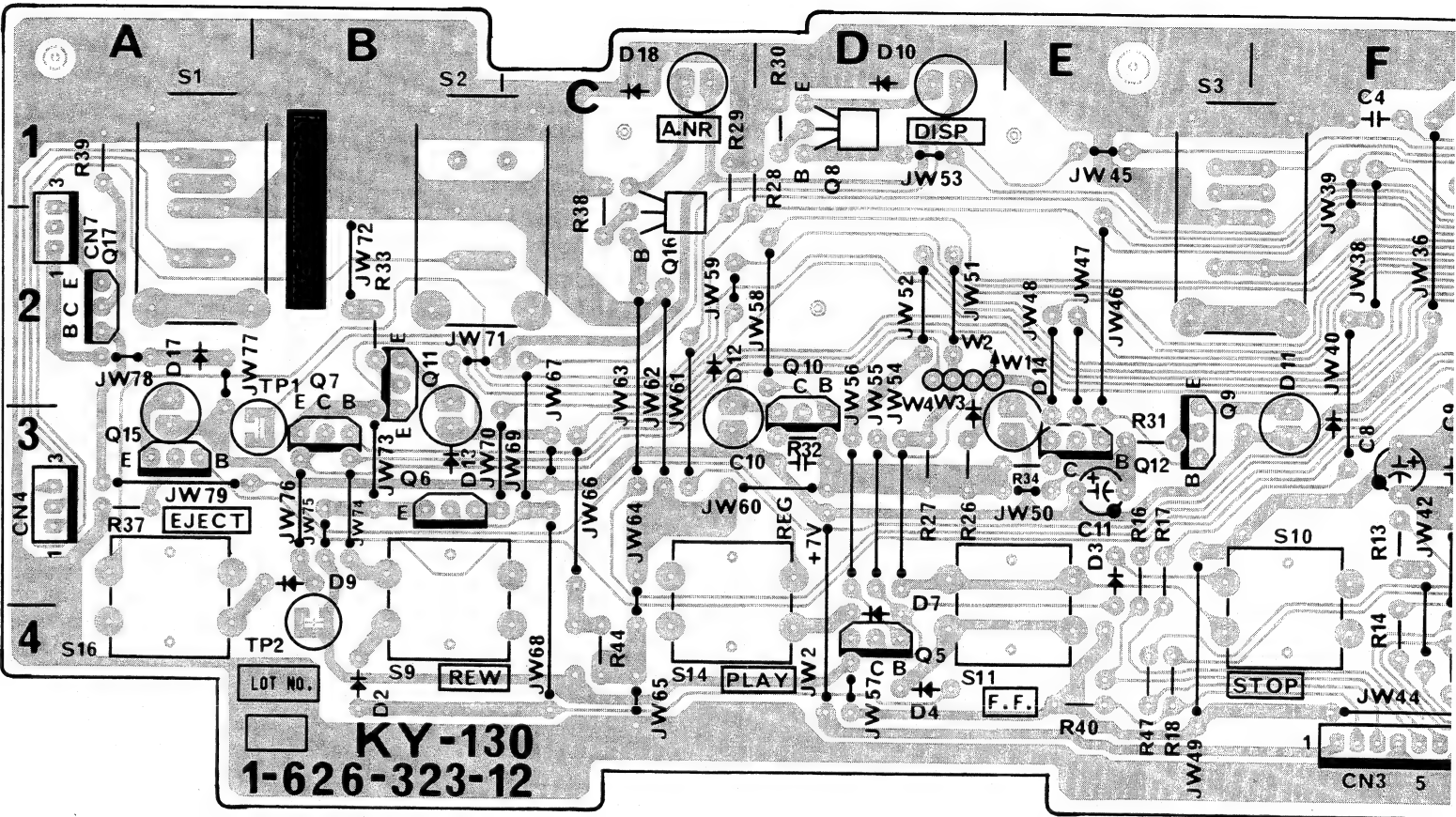
S/N UP TO 10188 (EK)

DP-87(1-626-315-11)

CN101 E-1
D101 B-1
D102 C-1
D103 D-1
D104 E-1
D105 A-1
IC101 A-1
Q101 A-1
Q102 A-1
S101 F-1
S102 F-1

KY-130(1-626-323-12)

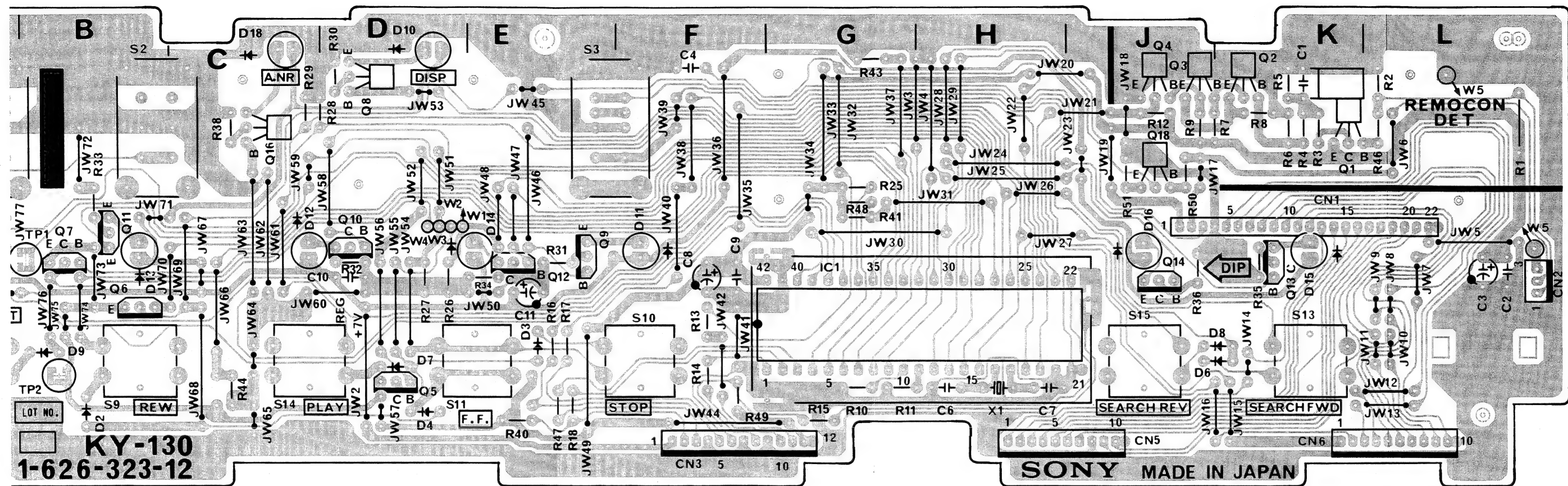
CN1	K-2	TP1	B-3
CN2	L-3	TP2	B-4
CN3	F-4		
CN4	A-3	X1	H-4
CN5	J-4		
CN6	L-4		
CN7	A-2		
D2	B-4		
D3	E-3		
D4	D-4		
D6	J-3		
D7	D-3		
D8	J-3		
D9	B-3		
D10	D-1		
D11	F-2		
D12	C-2		
D13	B-3		
D14	D-2		
D15	K-3		
D16	J-2		
D17	A-2		
D18	C-1		
IC1	G-3		
Q1	K-1		
Q2	K-1		
Q3	J-1		
Q4	J-1		
Q5	D-4		
Q6	B-3		
Q7	B-3		
Q8	D-1		
Q9	E-3		
Q10	D-2		
Q11	B-2		
Q12	E-3		
Q13	K-3		
Q14	J-3		
Q15	A-3		
Q16	C-2		
Q17	A-2		
Q18	J-2		
S1	A-1		
S2	B-1		
S3	E-1		
S9	B-3		
S10	F-3		
S11	E-3		
S13	K-3		
S14	C-3		
S15	J-3		
S16	A-3		



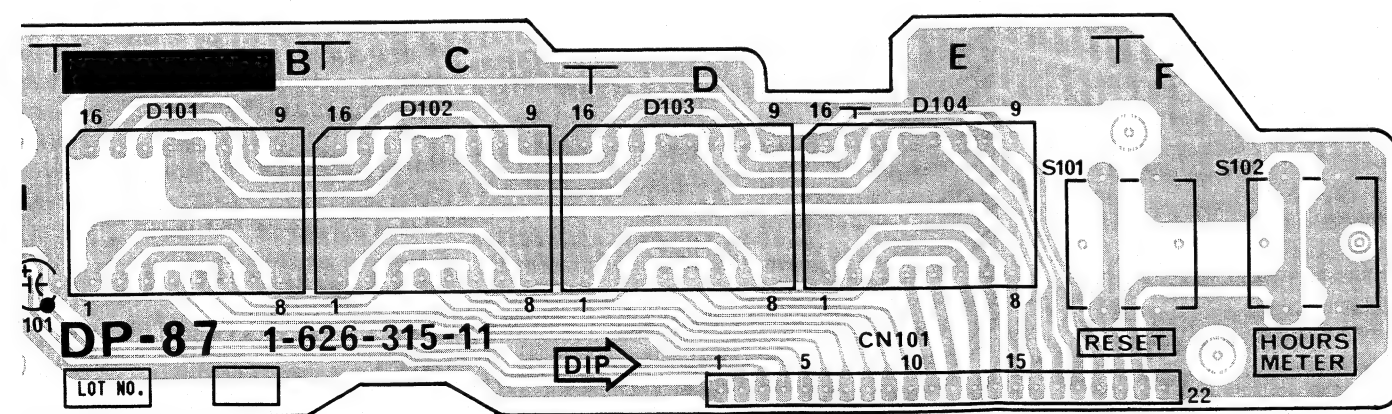
DP-87 — COMPONENT
1-626-315-11 (1)
BVW-22
BVW-22P

LAY
PLAY
MPOSE SWITCH

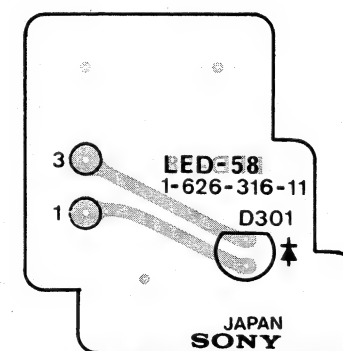
S/N UP TO 10188 (EK)



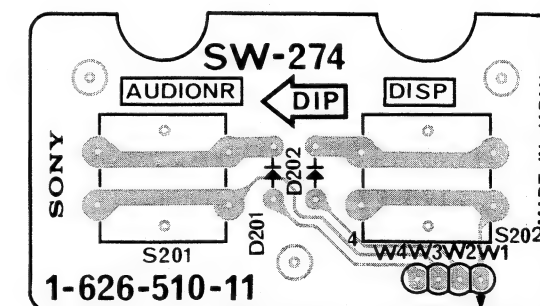
KY-130 —COMPONENT SIDE—
1-626-323-12(1)
BVW-22
BVW-22P



DP-87 —COMPONENT SIDE—
1-626-315-11(1)
BVW-22
BVW-22P



LED-58 —COMPONENT SIDE—
1-626-316-11(1)
BVW-22
BVW-22P

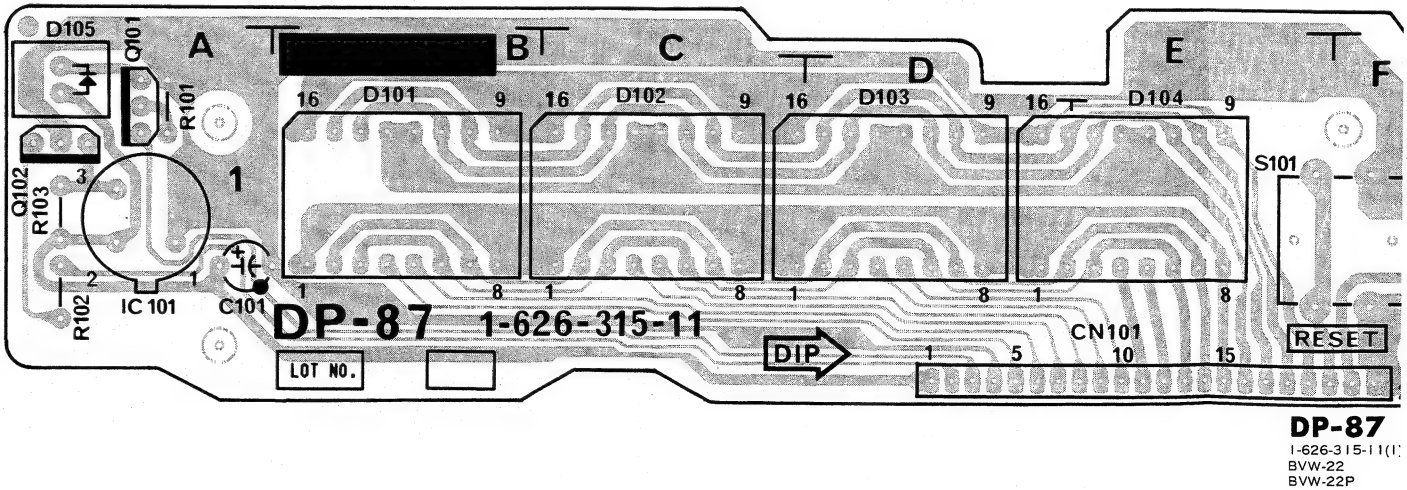
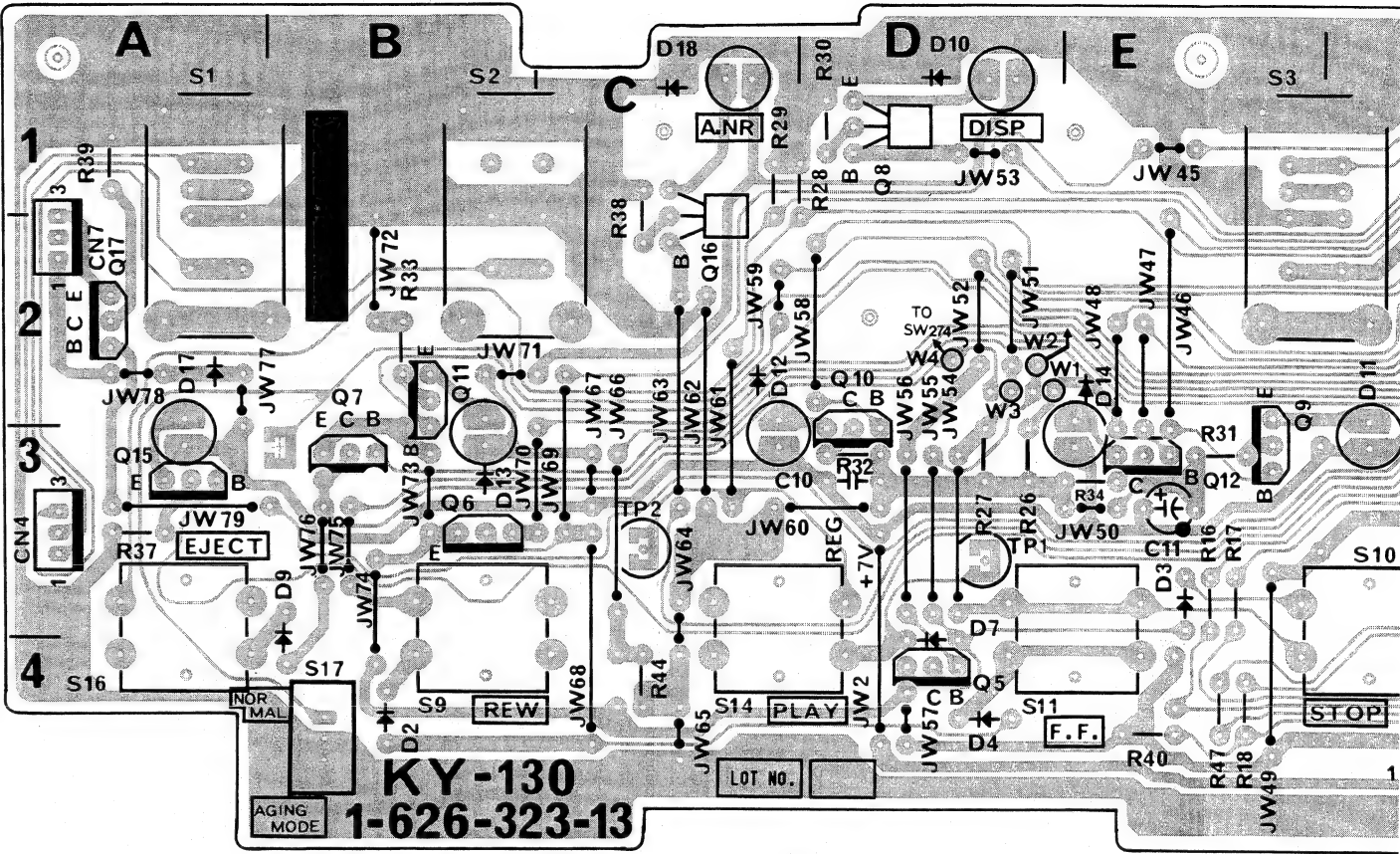


SW-274 —COMPONENT SIDE—
1-626-510-11(1)
BVW-22
BVW-22P

KY-130; FUNCTION KEY/ DISPLAY
DP-87; TIME COUNTER DISPLAY
SW-274; DOLBY NR/SUPERIMPOSE SWITCH
LED-58; AUTO OFF DISPLAY

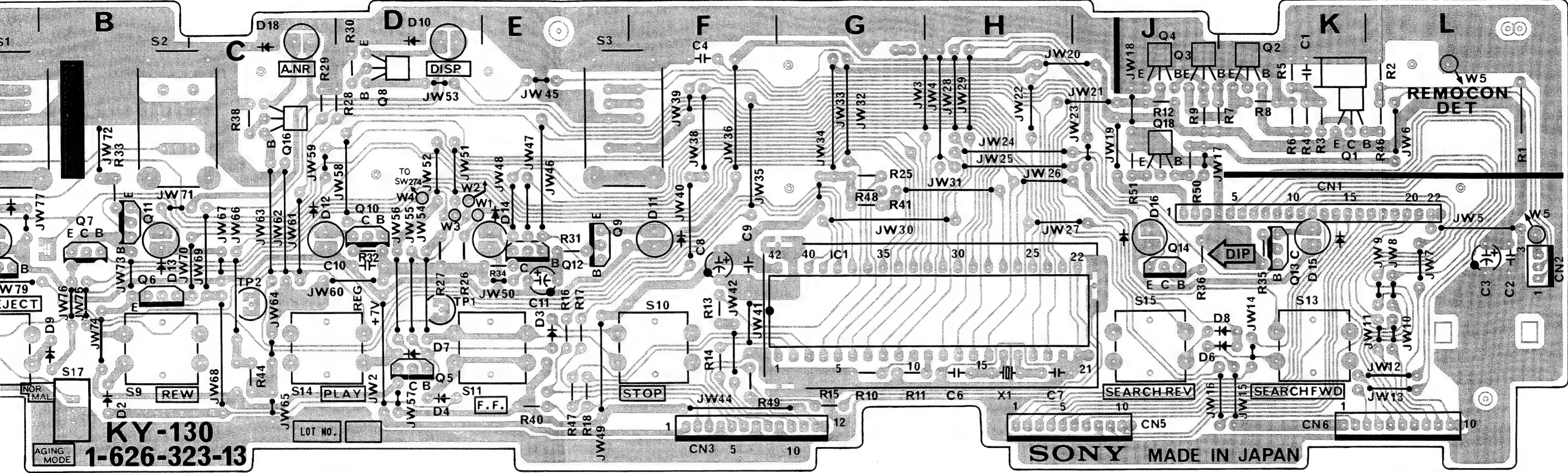
S/N 10189 AND HIGHER (EK)

DP-87(1-626-315-11)					KY-130(1-626-323-13)				
CN101	E-1	CN1	K-2	S17	B-4				
D101	B-1	CN2	L-3	TP1	D-3				
D102	C-1	CN3	F-4	TP2	C-3				
D103	D-1	CN4	A-3						
D104	E-1	CN5	J-4	X1	H-4				
D105	A-1	CN6	L-4						
		CN7	A-2						
IC101	A-1	D2	B-4						
Q101	A-1	D3	E-3						
Q102	A-1	D4	D-4						
		D6	J-3						
		D7	D-4						
S101	F-1	D8	J-3						
S102	F-1	D9	B-3						
		D10	D-1						
		D11	F-2						
		D12	C-2						
		D13	B-3						
		D14	E-2						
		D15	K-3						
		D16	J-2						
		D17	A-2						
		D18	C-1						
		IC1	G-3						
		Q1	K-1						
		Q2	K-1						
		Q3	J-1						
		Q4	J-1						
		Q5	D-4						
		Q6	B-3						
		Q7	B-3						
		Q8	D-1						
		Q9	E-3						
		Q10	D-2						
		Q11	B-2						
		Q12	E-3						
		Q13	K-3						
		Q14	J-3						
		Q15	A-3						
		Q16	C-2						
		Q17	A-2						
		Q18	J-2						
		S1	A-1						
		S2	B-1						
		S3	E-1						
		S9	B-3						
		S10	F-3						
		S11	E-3						
		S13	K-3						
		S14	C-3						
		S15	J-3						
		S16	A-3						

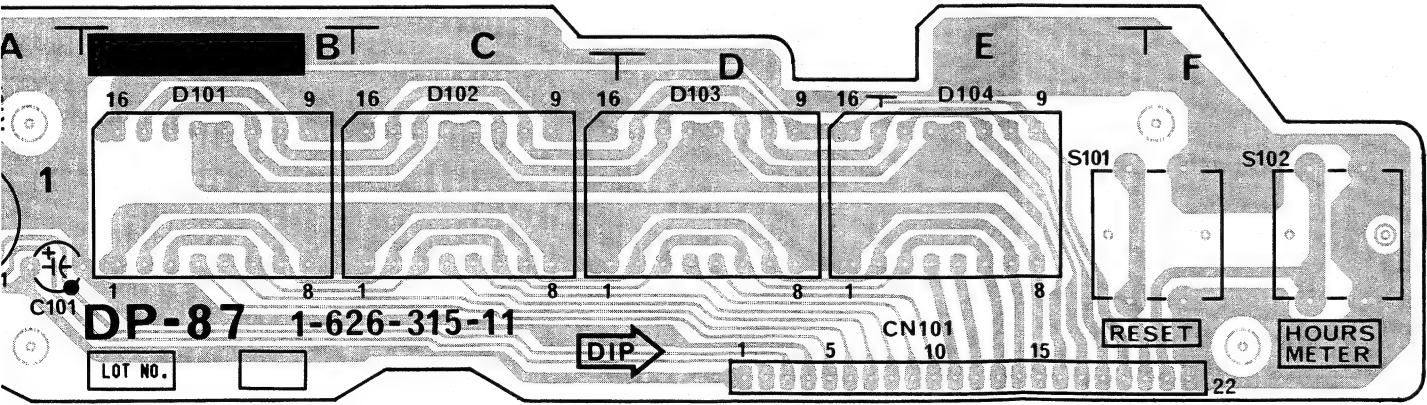


DISPLAY
DISPLAY
PERIMPOSE SWITCH
AY

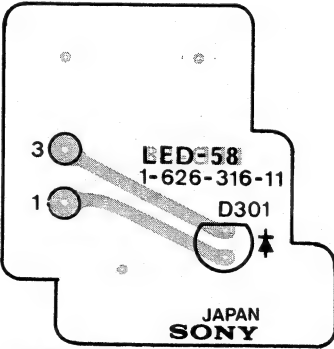
S/N 10189 AND HIGHER (EK)



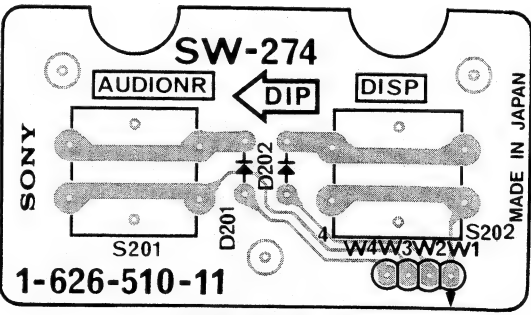
KY-130 —COMPONENT SIDE—
1-626-323-13(1)
BVW-22
BVW-22P



DP-87 —COMPONENT SIDE—
1-626-315-11(1)
BVW-22
BVW-22P



LED-58 —COMPONENT SIDE—
1-626-316-11(1)
BVW-22
BVW-22P



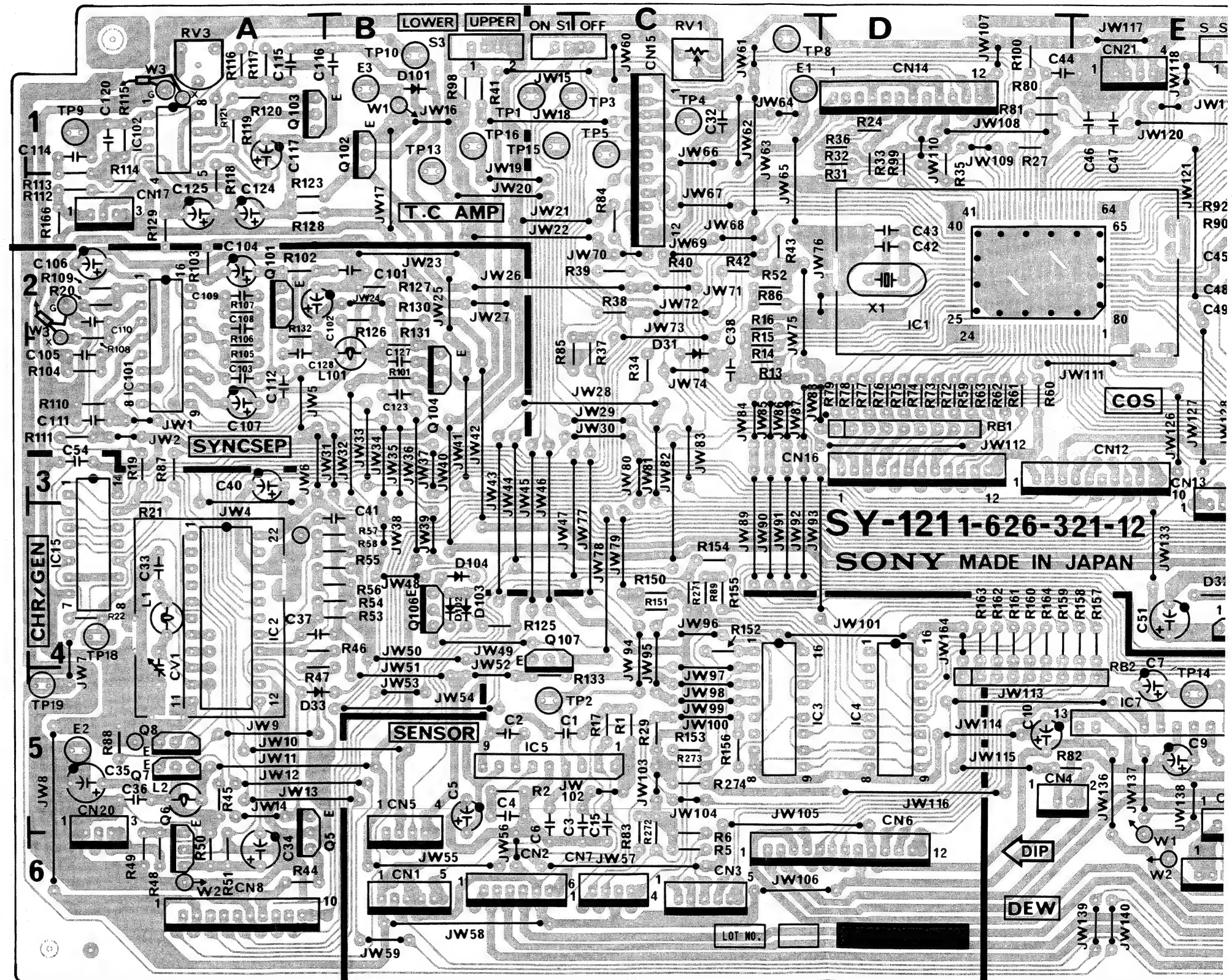
SW-274 —COMPONENT SIDE—
1-626-510-11(1)
BVW-22
BVW-22P

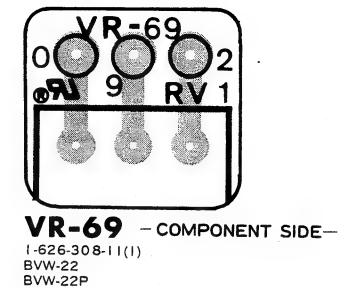
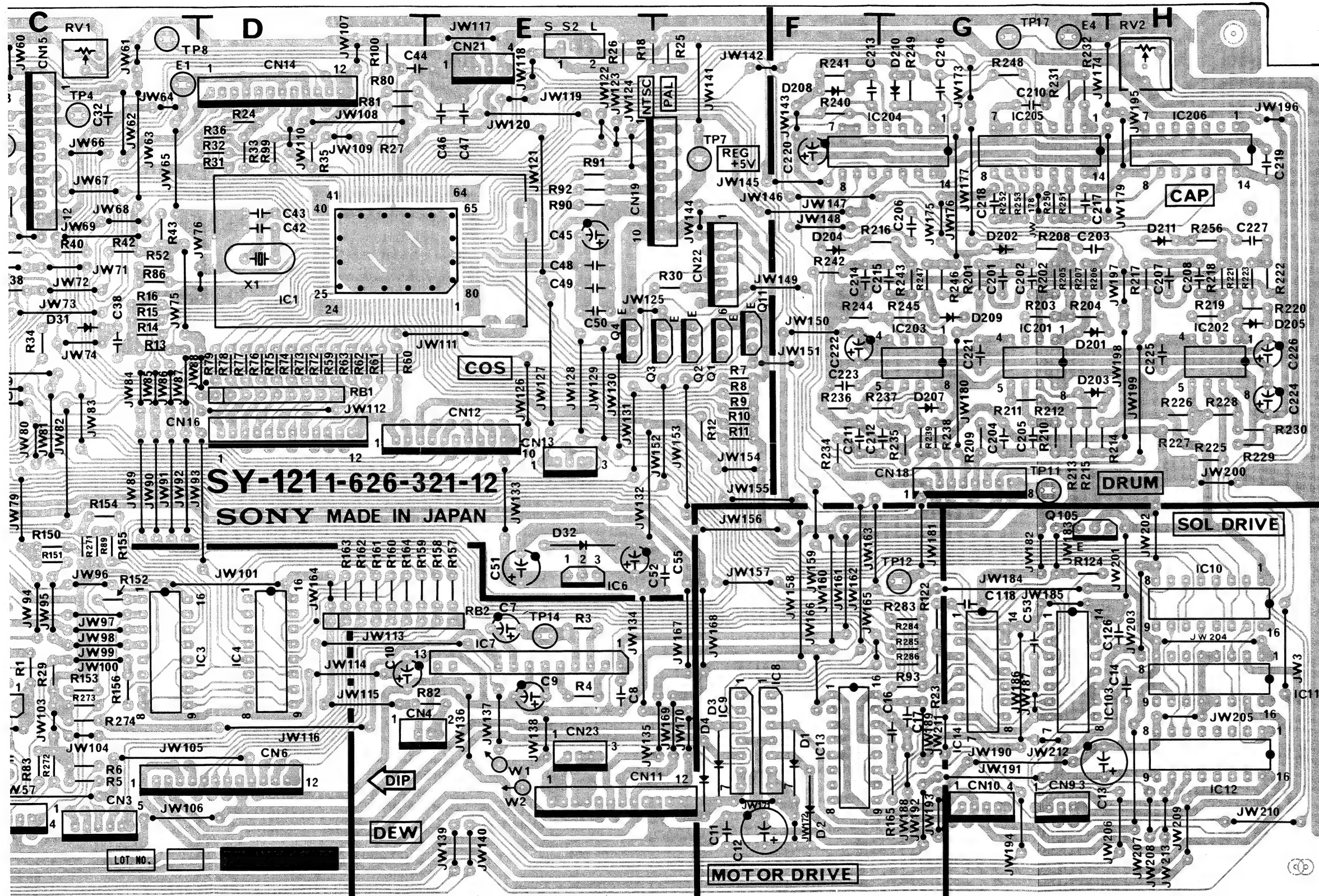
SY-121A; SYSTEM CONTROL
VR-69; TRACKING CONTROL VOLUME

S/N UP TO 10188 (EK)

SY-121A(1-626-321-12)

CN1	B-6	IC6	E-4	TP12	G-4
CN2	B-6	IC7	E-5	TP13	B-1
CN3	C-6	IC8	F-5	TP14	E-5
CN4	D-5	IC9	F-5	TP15	B-1
CN5	B-5	IC10	H-4	TP16	B-1
CN6	D-6	IC11	H-5	TP17	G-1
CN7	C-6	IC12	H-5	TP18	A-4
CN8	A-6	IC13	F-5	TP19	A-5
CN9	G-6	IC14	G-5		
CN10	G-6	IC15	A-4	X1	D-2
CN11	E-6	IC101	A-3		
CN12	E-3	IC102	A-1		
CN13	E-4	IC103	G-5		
CN14	D-1	IC201	G-3		
CN15	C-1	IC202	H-3		
CN16	D-3	IC203	G-3		
CN17	A-2	IC204	G-1		
CN18	G-4	IC205	G-1		
CN19	F-2	IC206	H-1		
CN20	A-5				
CN21	E-1	Q1	F-3		
CN22	F-2	Q2	F-3		
CN23	E-5	Q3	F-3		
		Q4	E-3		
CV1	A-4	Q5	A-5		
		Q6	A-6		
D1	F-6	Q7	A-5		
D2	F-6	Q8	A-5		
D3	F-6	Q11	F-3		
D4	F-6	Q101	A-2		
D31	C-3	Q102	B-1		
D32	E-4	Q103	A-1		
D33	A-5	Q104	B-3		
D101	B-1	Q105	G-4		
D102	B-4	Q106	B-4		
D103	B-4	Q107	B-4		
D104	B-4				
D201	G-3	RB1	D-3		
D202	G-2	RB2	D-5		
D203	G-3				
D204	F-2	RV1	C-1		
D205	H-3	RV2	H-1		
D207	G-3	RV3	A-1		
D208	F-1				
D209	G-3	S1	B-1		
D210	G-1	S2	E-1		
D211	H-2	S3	B-1		
E1	C-1	TP1	B-1		
E2	A-5	TP2	B-5		
E3	B-1	TP3	C-1		
E4	G-1	TP4	C-1		
		TP5	C-1		
IC1	D-2	TP7	F-1		
IC2	A-4	TP8	C-1		
IC3	C-5	TP9	A-1		
IC4	D-5	TP10	B-1		
IC5	B-5	TP11	G-4		





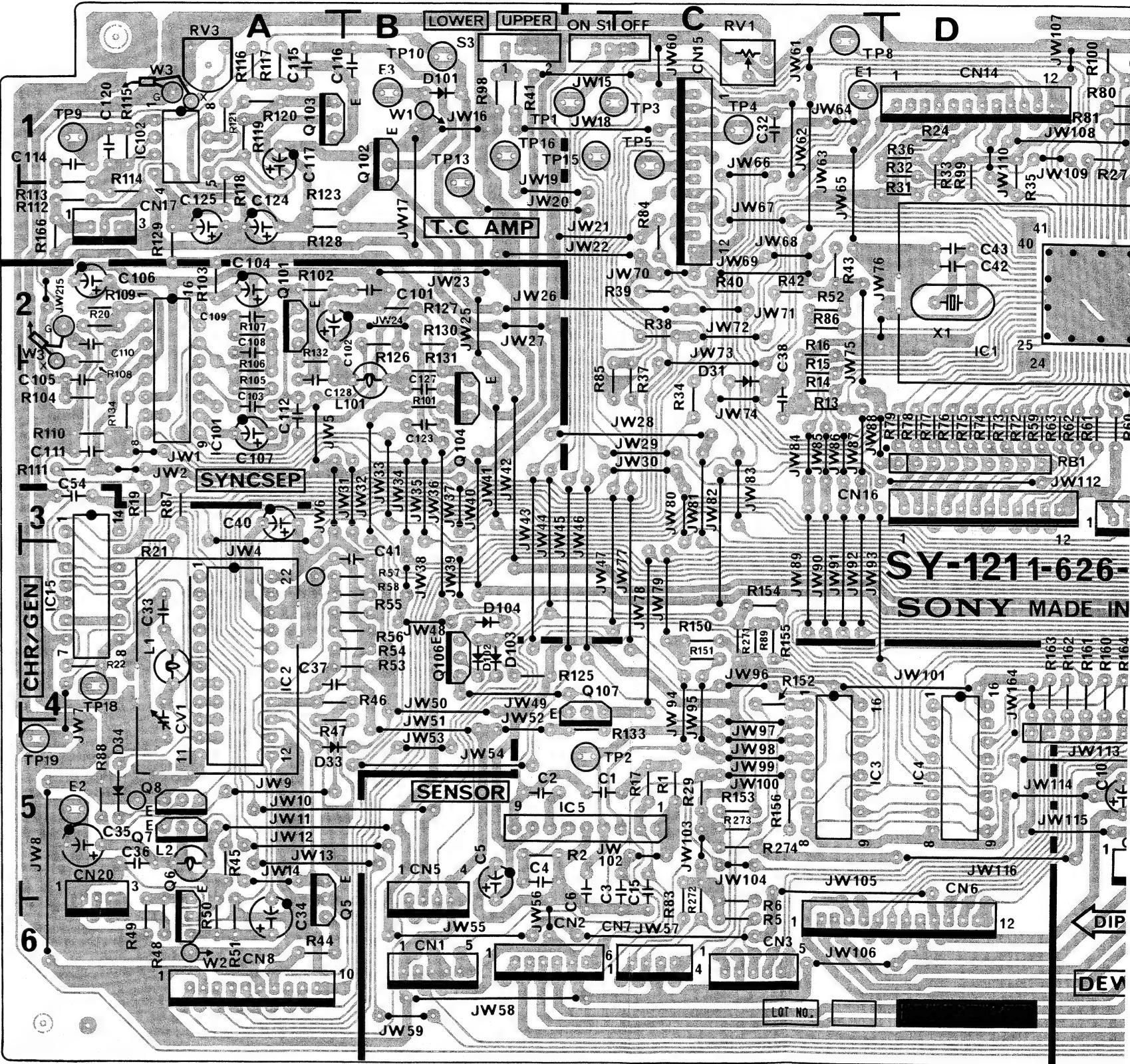
SY-121/A -COMPONENT SIDE-
1-626-321-12(1)
BVW-22
BVW-22P

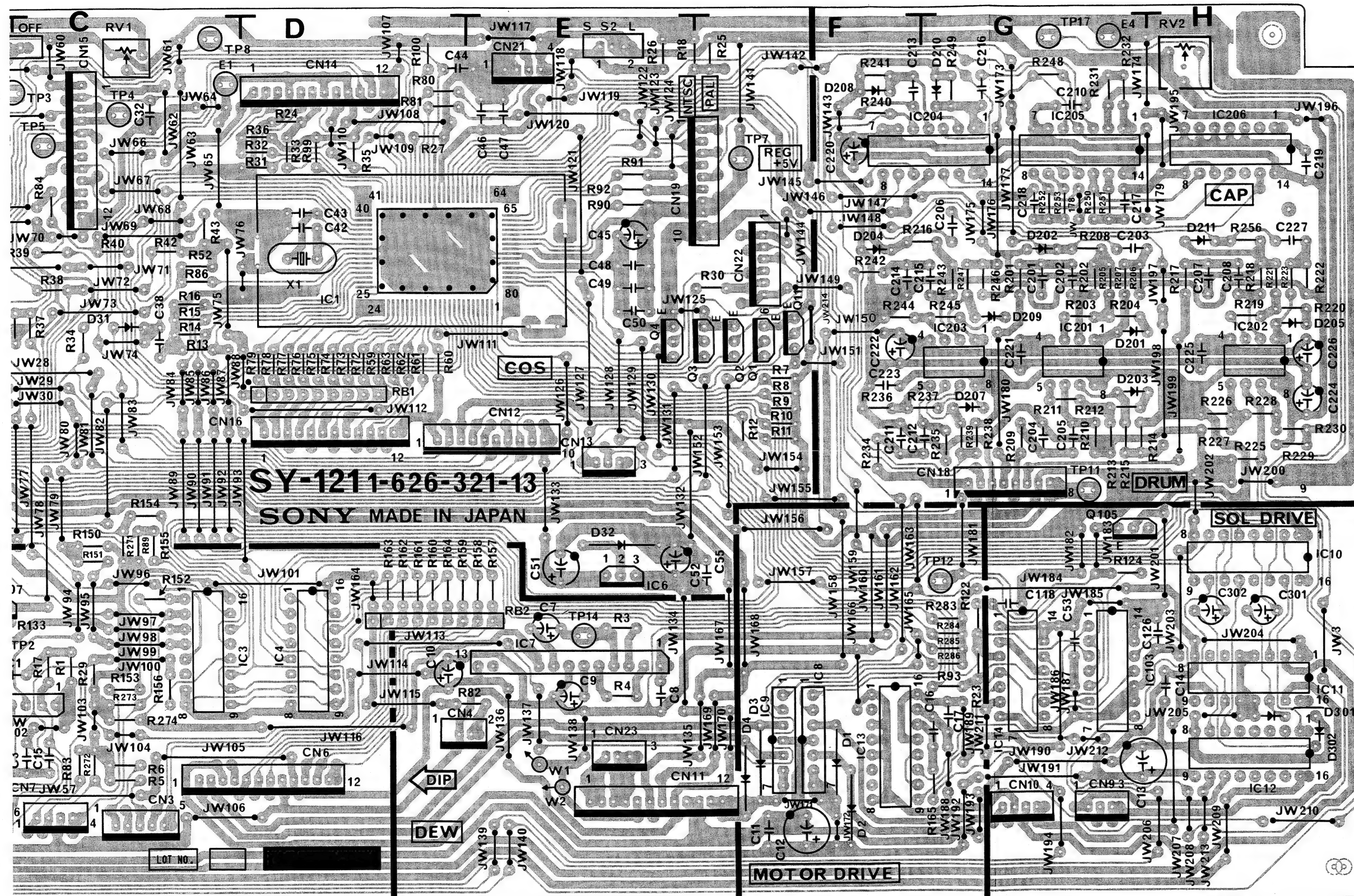
SY-121A; SYSTEM CONTROL
VR-69; TRACKING CONTROL VOLUME

S/N 10189 AND HIGHER (EK)

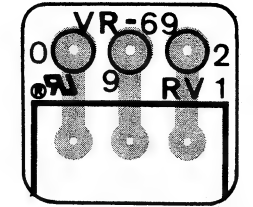
SY-121A(1-626-321-13)

CN1	B-6	IC3	C-5	TP9	A-1
CN2	B-6	IC4	D-5	TP10	B-1
CN3	C-6	IC5	B-5	TP11	G-4
CN4	D-5	IC6	E-4	TP12	G-4
CN5	B-5	IC7	E-5	TP13	B-1
CN6	D-6	IC8	F-5	TP14	E-5
CN7	C-6	IC9	F-5	TP15	B-1
CN8	A-6	IC10	H-4	TP16	B-1
CN9	G-6	IC11	H-5	TP17	G-1
CN10	G-6	IC12	H-5	TP18	A-4
CN11	E-6	IC13	F-5	TP19	A-5
CN12	E-3	IC14	G-5		
CN13	E-4	IC15	A-4	X1	D-2
CN14	D-1	IC101	A-3		
CN15	C-1	IC102	A-1		
CN16	D-3	IC103	G-5		
CN17	A-2	IC201	G-3		
CN18	G-4	IC202	H-3		
CN19	F-2	IC203	G-3		
CN20	A-5	IC204	G-1		
CN21	E-1	IC205	G-1		
CN22	F-2	IC206	H-1		
CN23	E-5				
		Q1	F-3		
CV1	A-4	Q2	F-3		
		Q3	F-3		
D1	F-6	Q4	E-3		
D2	F-6	Q5	A-5		
D3	F-6	Q6	A-6		
D4	F-6	Q7	A-5		
D31	C-3	Q8	A-5		
D32	E-4	Q11	F-3		
D33	A-5	Q101	A-2		
D34	A-5	Q102	B-1		
D101	B-1	Q103	A-1		
D102	B-4	Q104	B-3		
D103	B-4	Q105	G-4		
D104	B-4	Q106	B-4		
D201	G-3	Q107	B-4		
D202	G-2				
D203	G-3	RB1	D-3		
D204	F-2	RB2	D-5		
D205	H-3				
D207	G-3	RV1	C-1		
D208	F-1	RV2	H-1		
D209	G-3	RV3	A-1		
D210	G-1				
D211	H-2	S1	B-1		
D301	H-5	S2	E-1		
D302	H-5	S3	B-1		
E1	C-1	TP1	B-1		
E2	A-5	TP2	B-5		
E3	B-1	TP3	C-1		
E4	G-1	TP4	C-1		
		TP5	C-1		
IC1	D-2	TP7	F-1		
IC2	A-4	TP8	C-1		



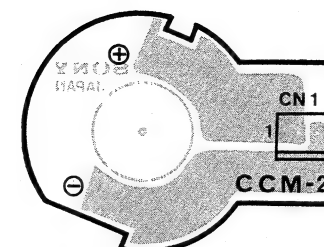


SY-121/A —COMPONENT SIDE—
 I-626-321-13(I)
 BVW-22
 BVW-22P

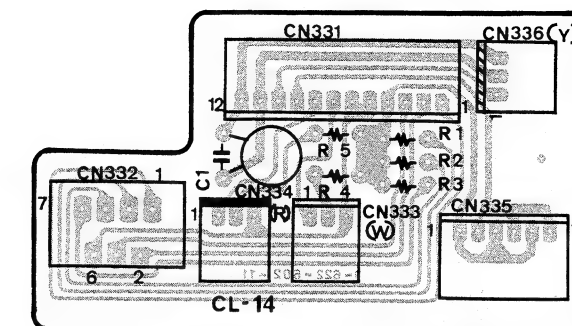


VR-69 —COMPONENT SIDE—
 I-626-308-11(I)
 BVW-22
 BVW-22P

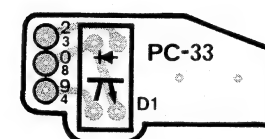
CCM-2; CASSETTE-UP COMPARTMENT MOTOR
 CL-14; CASSETTE-UP COMPARTMENT
 PC-33; CASSETTE-UP COMPARTMENT (CASSETTE UP/DOWN DETECTOR)
 PC-41; CASSETTE-UP COMPARTMENT (CASSETTE IN DETECTOR)
 PC-47; CASSETTE-UP COMPARTMENT (L/S DETECTOR)



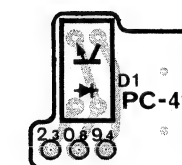
CCM-2 —COMPONENT SIDE—
 I-623-198-11(I)
 BVW-22
 BVW-22P



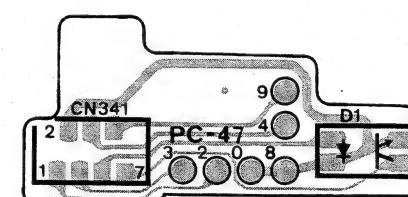
CL-14 —COMPONENT SIDE—
 I-622-602-11(I)
 BVW-22
 BVW-22P



PC-33 —COMPONENT SIDE—
 I-622-604-11(I)
 BVW-22
 BVW-22P

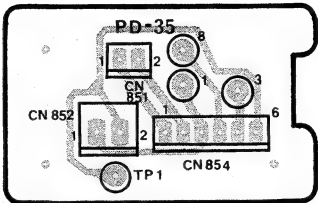


PC-41 —COMPONENT SIDE—
 I-623-267-11(I)
 BVW-22
 BVW-22P

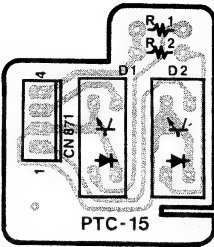


PC-47 —COMPONENT SIDE—
 I-628-786-11(I)
 BVW-22
 BVW-22P

PD-35; PINCH SOLENOID
PTC-15; THREAD/UNTHREAD END SENSOR
PTC-20; CASSETTE DETECTOR (TAPE THICKNESS, REEL HUB DIAMETER, METAL/OXIDE)
PTC-21; REEL TABLE POSITION DETECTOR
PTC-36; CASSETTE DETECTOR (TAPE THICKNESS, REEL HUB DIAMETER, METAL/OXIDE)



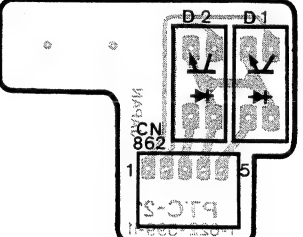
PD-35 —COMPONENT SIDE—
I-622-596-11(I)
BVW-22
BVW-22P



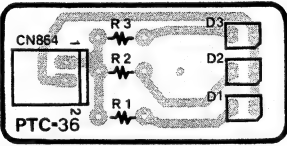
PTC-15 —COMPONENT SIDE—
I-622-597-11(I)
BVW-22
BVW-22P



PTC-20 —COMPONENT SIDE—
I-622-598-11(I)
BVW-22
BVW-22P



PTC-21 —COMPONENT SIDE—
I-622-599-11(I)
BVW-22
BVW-22P

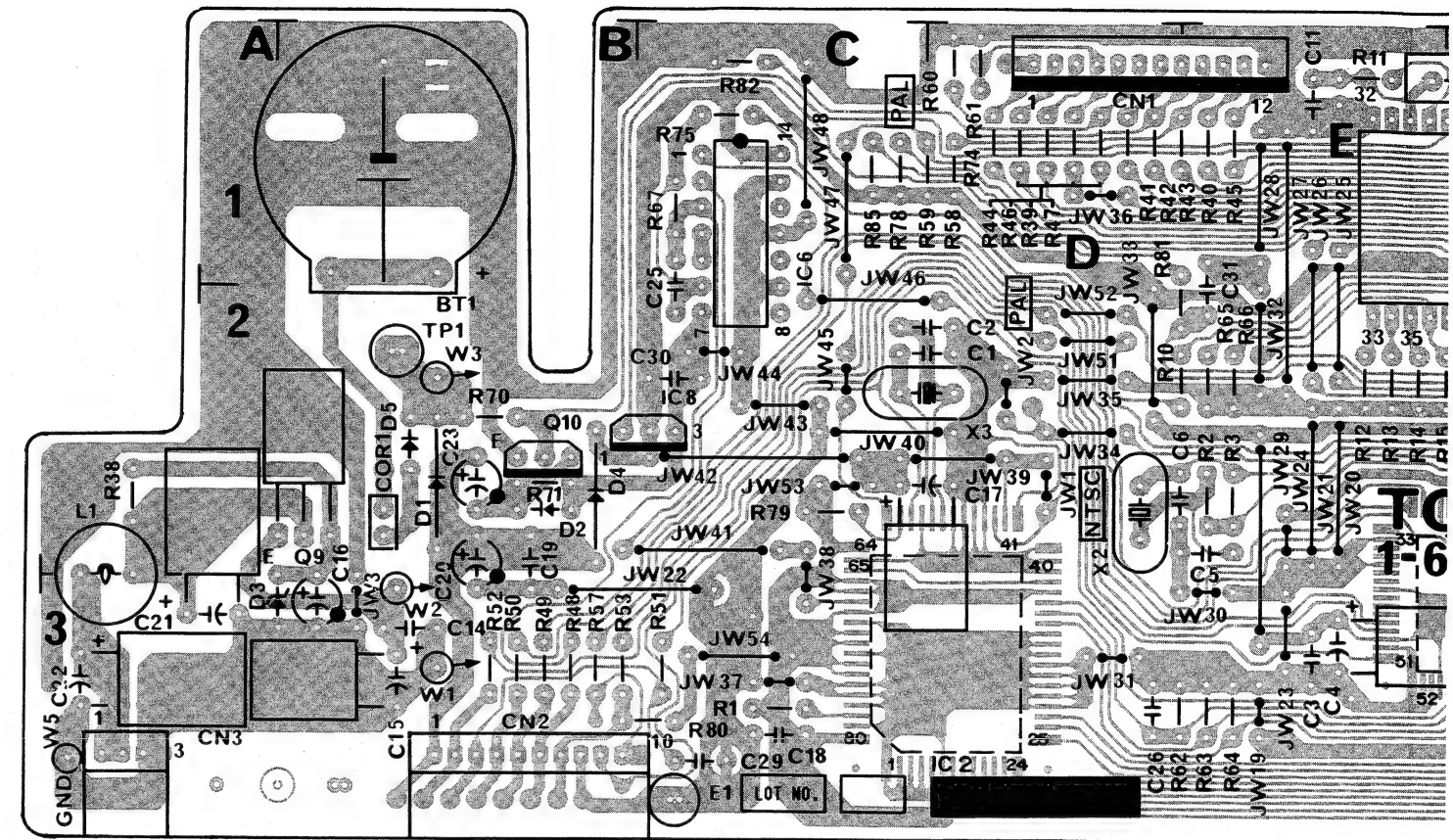


PTC-36 —COMPONENT SIDE—
I-622-601-11(I)
BVW-22
BVW-22P

TC-49A(1-626-322-13)

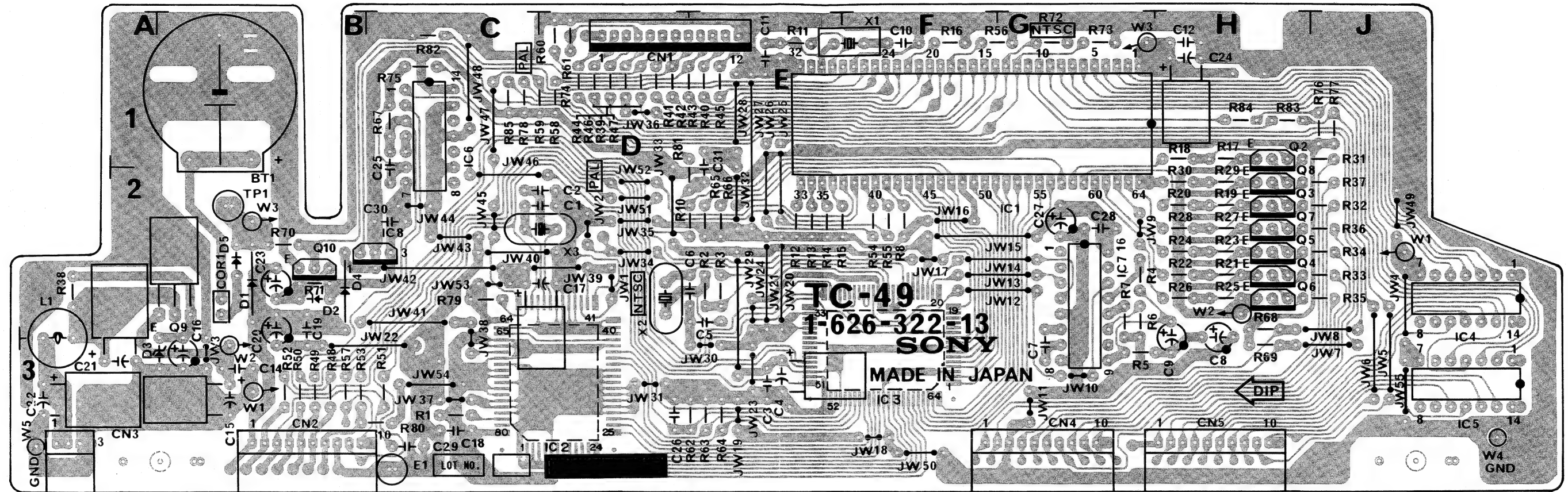
BT1	B-1	
CN1	D-1	
CN2	B-3	
CN3	A-3	
CN4	G-3	
CN5	H-3	
COR1	B-2	
D1	B-2	
D2	B-2	
D3	A-3	
D4	B-2	
D5	B-2	
E1	C-3	
IC1	F-1	
IC2	F-2	S
IC3	D-3	S
IC4	J-2	
IC5	J-3	
IC6	C-1	
IC7	G-2	
IC8	C-2	
Q2	H-1	
Q3	H-2	
Q4	H-2	
Q5	H-2	
Q6	H-2	
Q7	H-2	
Q8	H-2	
Q9	B-2	
Q10	B-2	
TP1	B-2	
X1	F-1	
X2	D-2	
X3	D-2	

. S; SOLDERING SIDE



TC-49A; TIME CODE READER

S/N UP TO 10188 (EK)

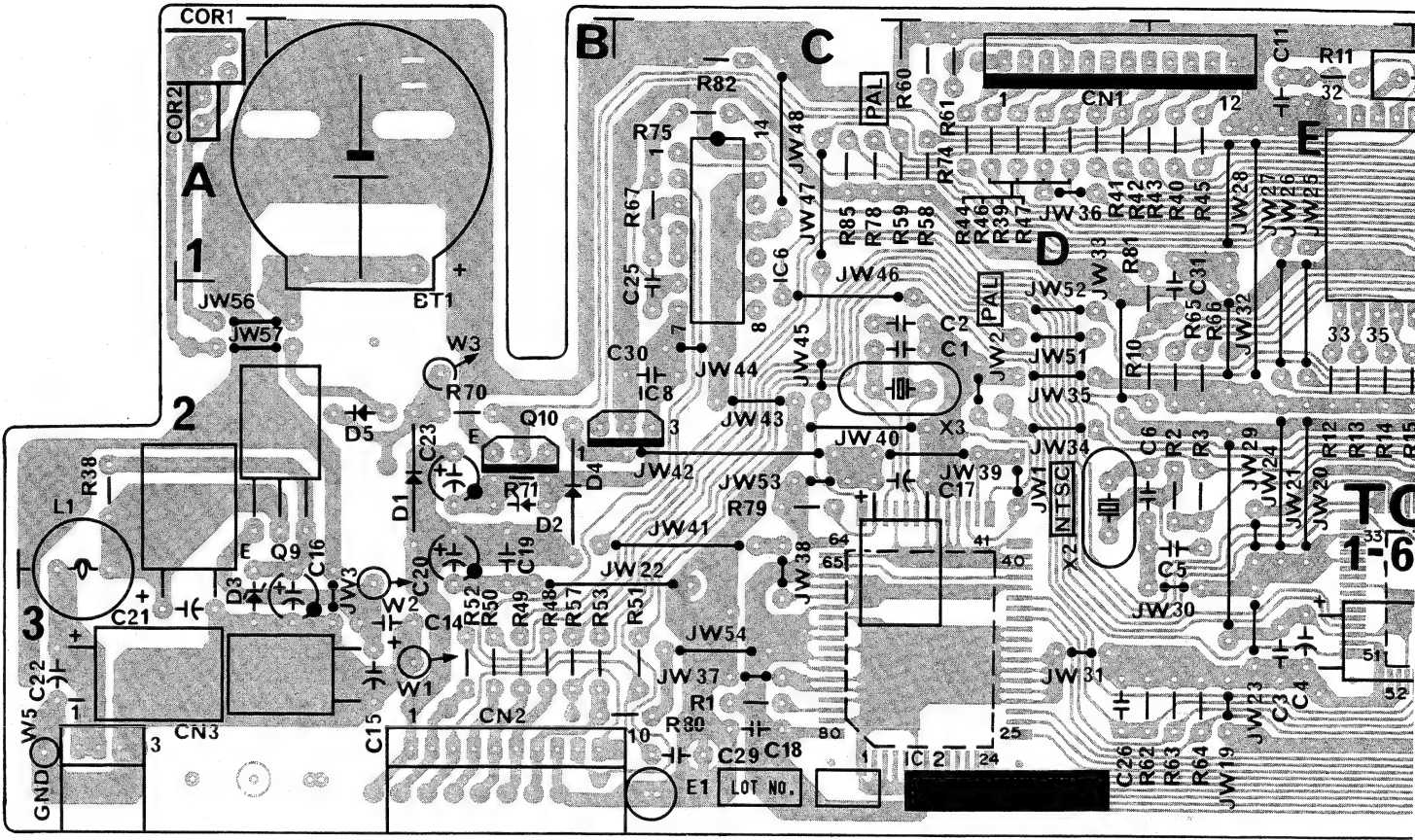


TC-49/A —COMPONENT SIDE—
1-626-322-13(1)
BVW-22
BVW-22P

JE

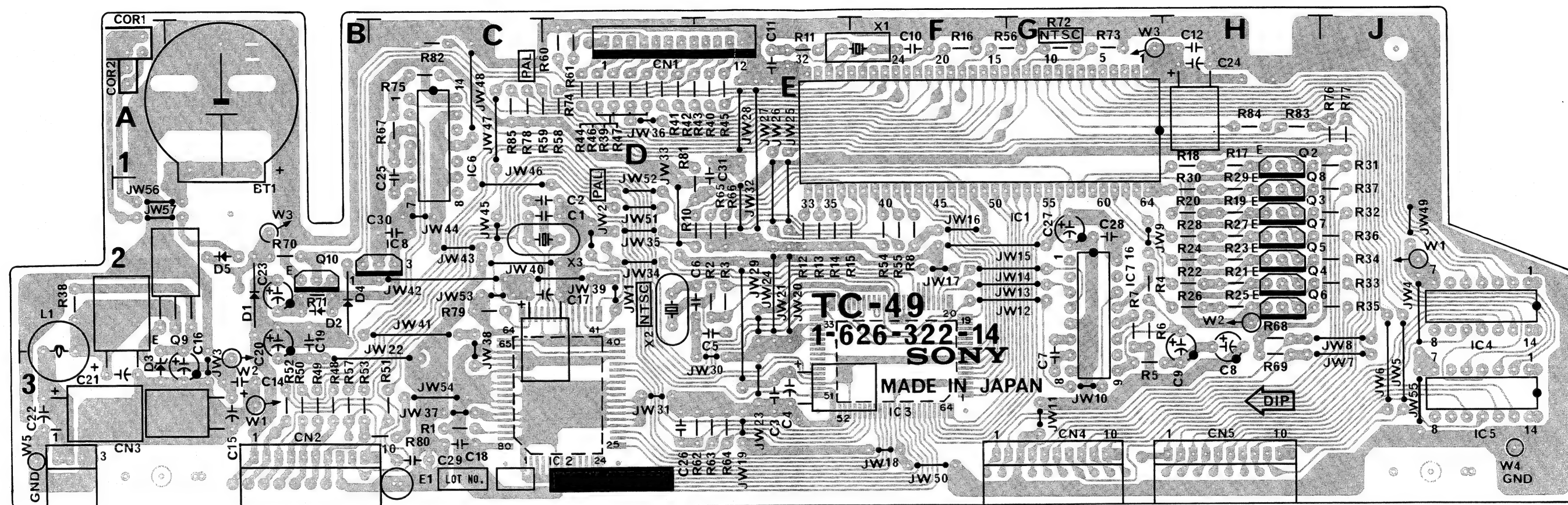
TC-49A(1-626-322-14)

BT1	B-1
CN1	D-1
CN2	B-3
CN3	A-3
CN4	G-3
CN5	H-3
COR1	A-1
COR2	A-1
D1	B-2
D2	B-2
D3	A-3
D4	B-2
D5	B-2
E1	C-3
IC1	F-1
IC2	F-2 S
IC3	D-3 S
IC4	J-2
IC5	J-3
IC6	C-1
IC7	G-2
IC8	C-2
Q2	H-1
Q3	H-2
Q4	H-2
Q5	H-2
Q6	H-2
Q7	H-2
Q8	H-2
Q9	B-2
Q10	B-2
X1	F-1
X2	D-2
X3	D-2
-	S; SOLDERING SIDE



TC-49A; TIME CODE READER

S/N 10189 TO 10363 (EK)

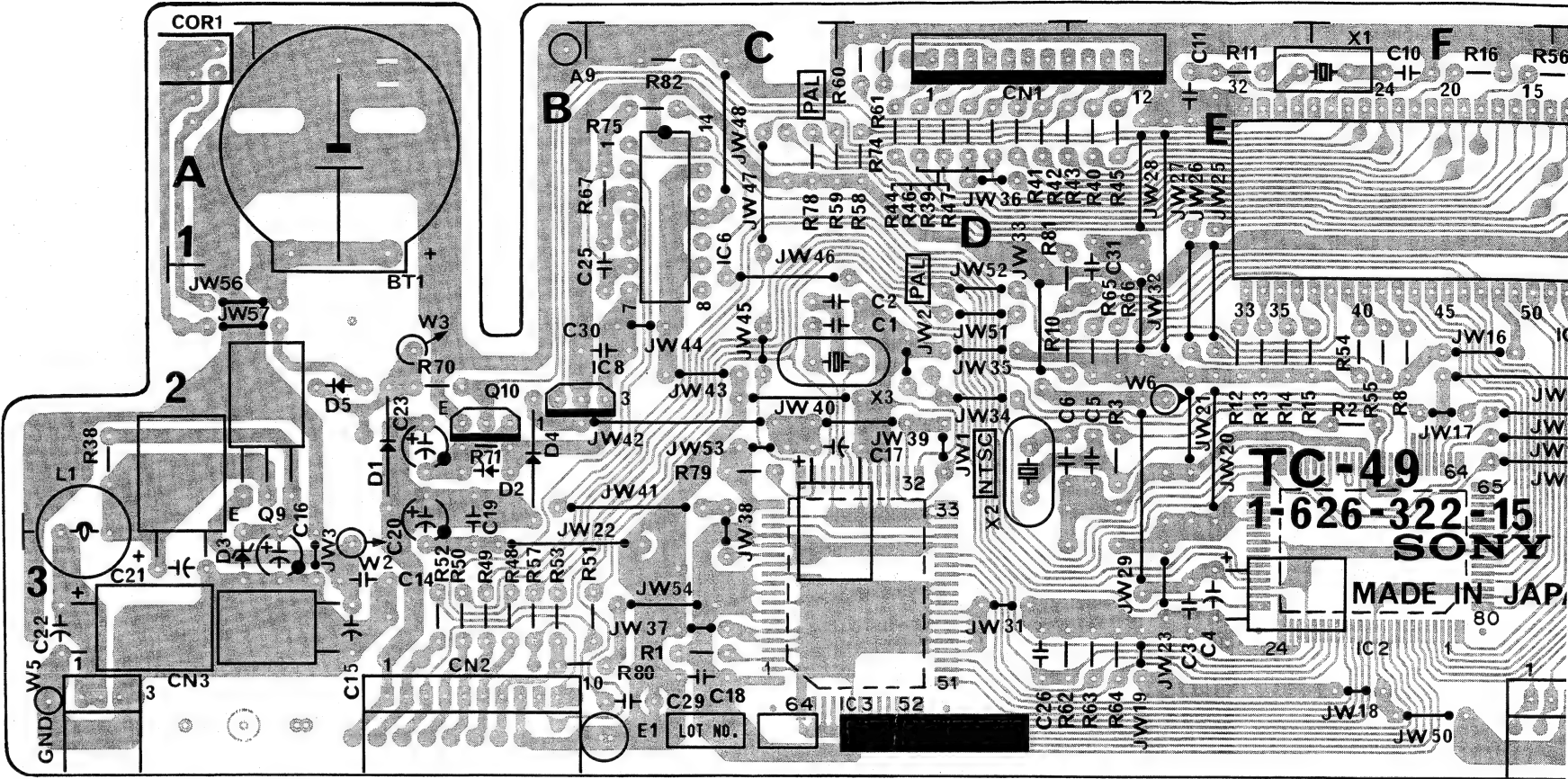


TC-49/A—COMPONENT SIDE—
1-626-322-14(1)
BVW-22
BVW-22P

TC-49A(1-626-322-15)

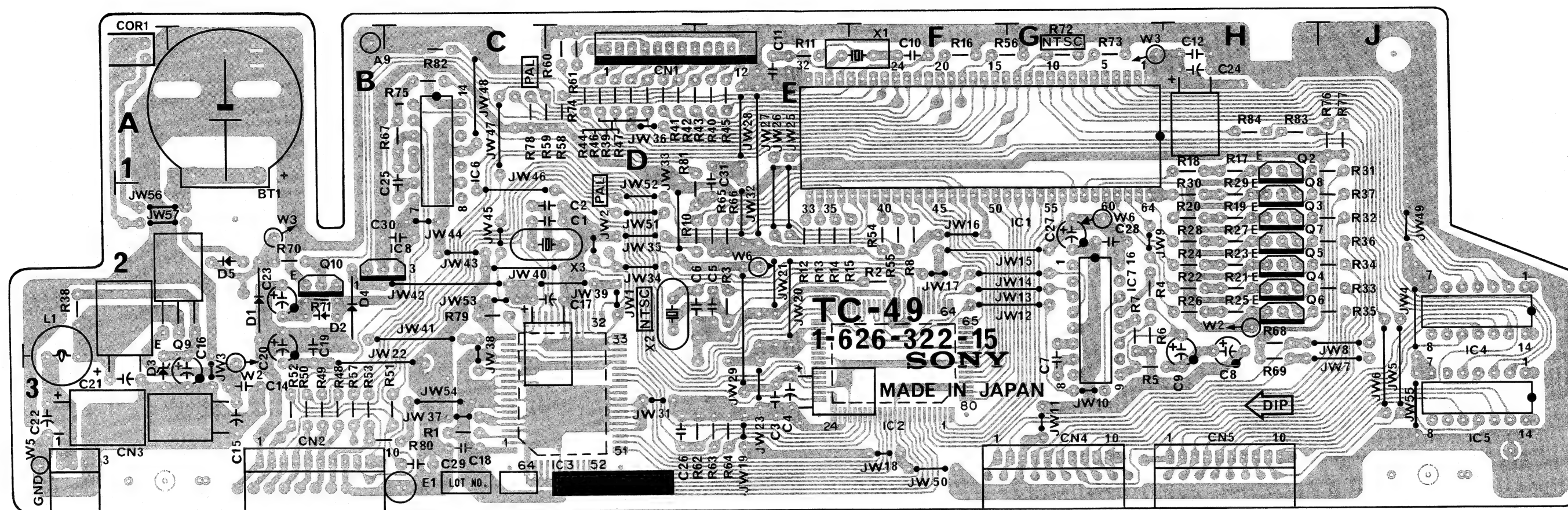
BT1	B-1
CN1	D-1
CN2	B-3
CN3	A-3
CN4	G-3
CN5	H-3
COR1	A-1
D1	B-2
D2	B-2
D3	A-3
D4	B-2
D5	B-2
E1	C-3
IC1	F-1
IC2	F-2 S
IC3	D-3 S
IC4	J-2
IC5	J-3
IC6	C-1
IC7	G-2
IC8	C-2
Q2	H-1
Q3	H-2
Q4	H-2
Q5	H-2
Q6	H-2
Q7	H-2
Q8	H-2
Q9	B-2
Q10	B-2
X1	F-1
X2	D-2
X3	D-2

**-* S; SOLDERING SIDE



TC-49A; TIME CODE READER

S/N 10364 AND HIGHER (EK)

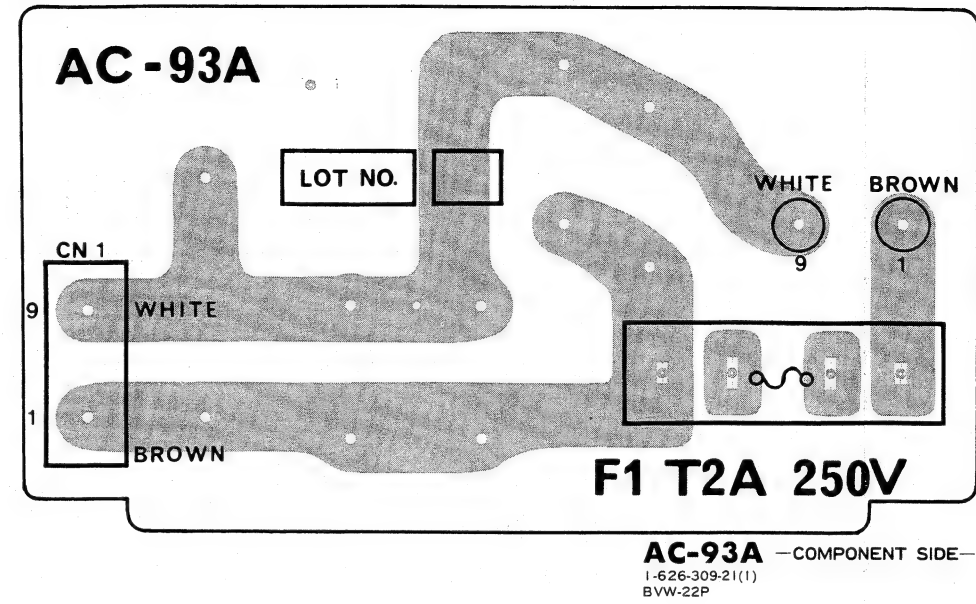


TC-49/A —COMPONENT SIDE—
 1-626-322-15(1)
 BVW-22
 BVW-22P

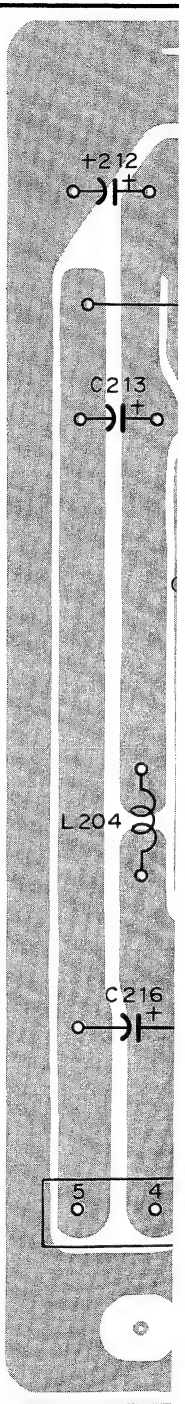
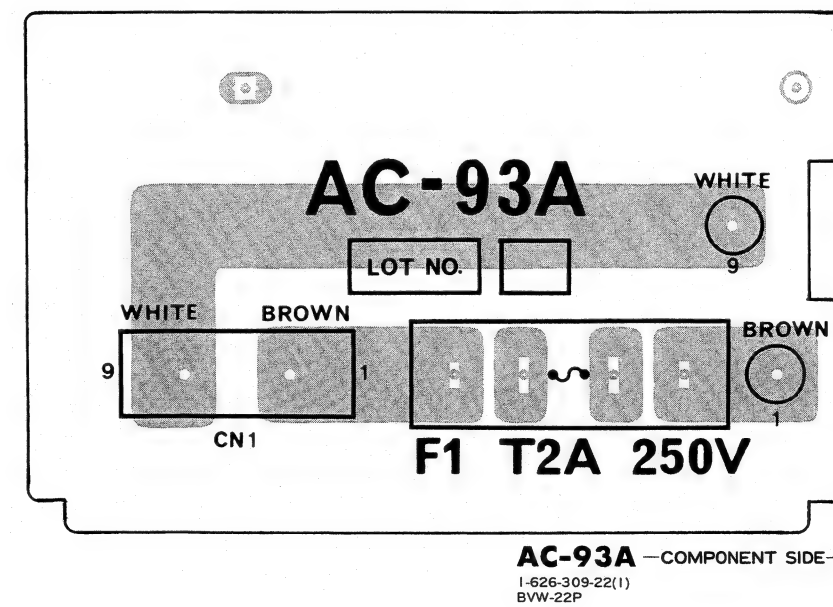
AC-93A, UR-14E AC-93A, UR-14E

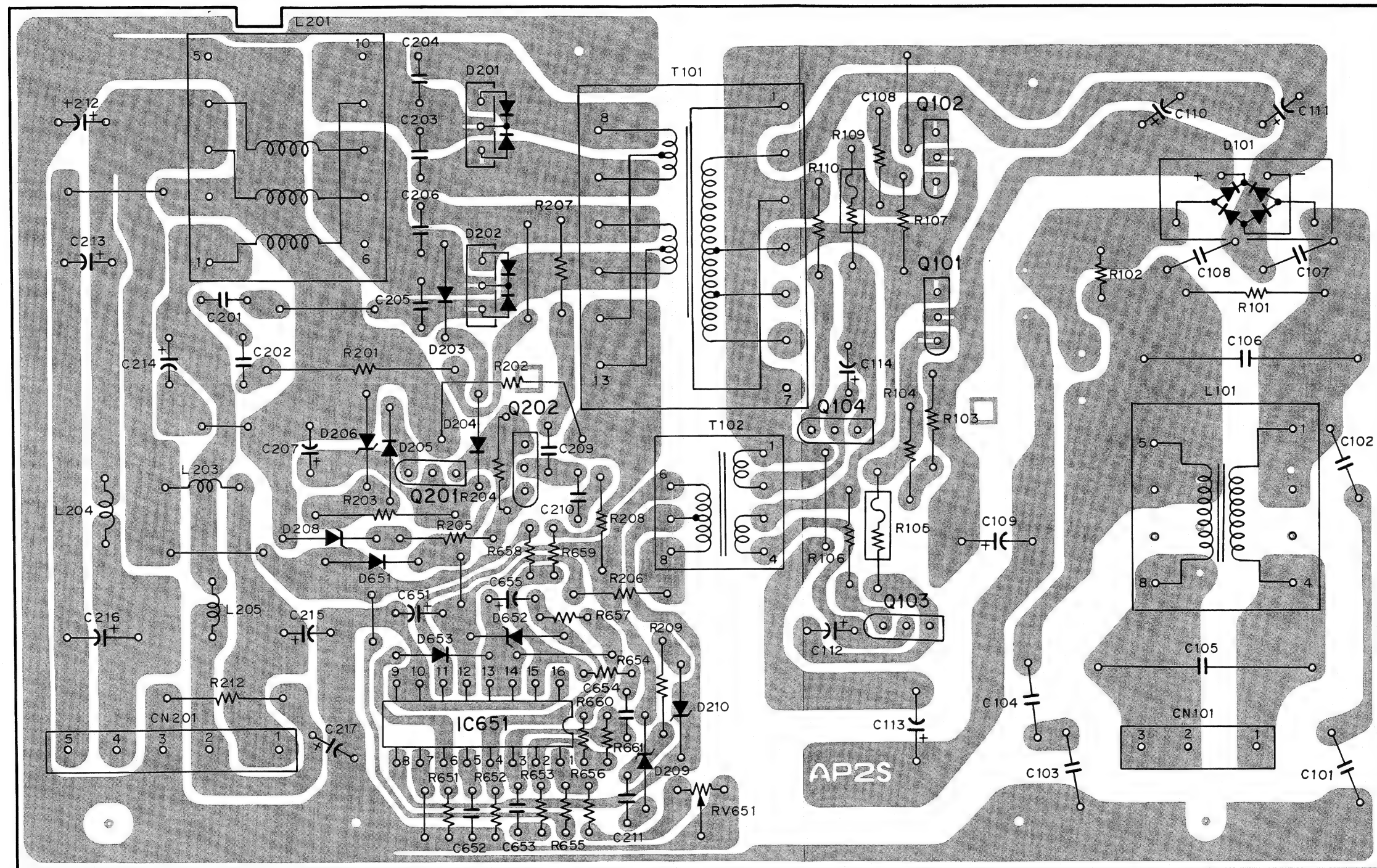
AC-93A; AC INPUT
UR-14E; SWITCHING REGULATOR

S/N UP TO 10188 (EK)



S/N 10189 AND HIGHER (EK)

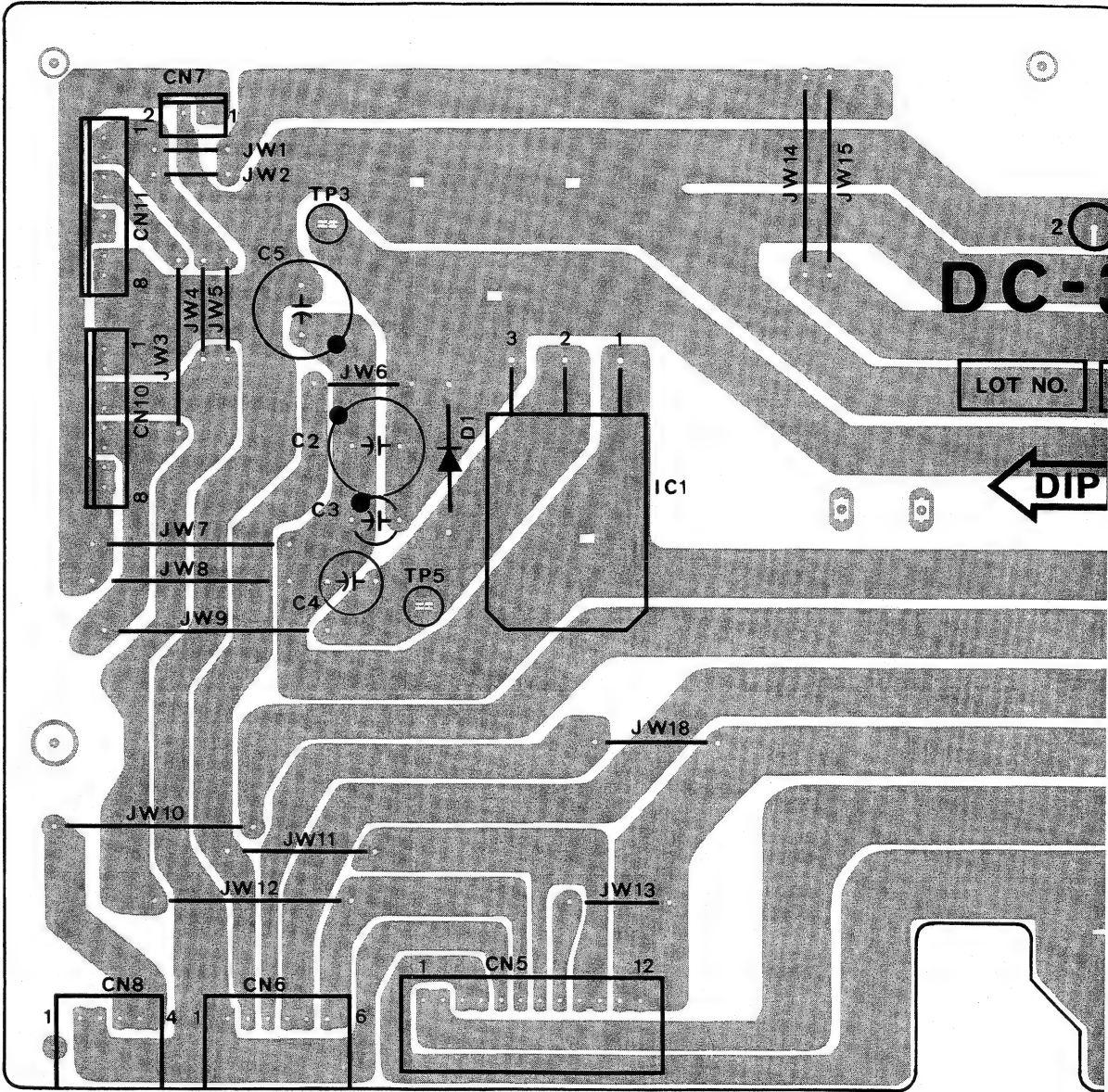




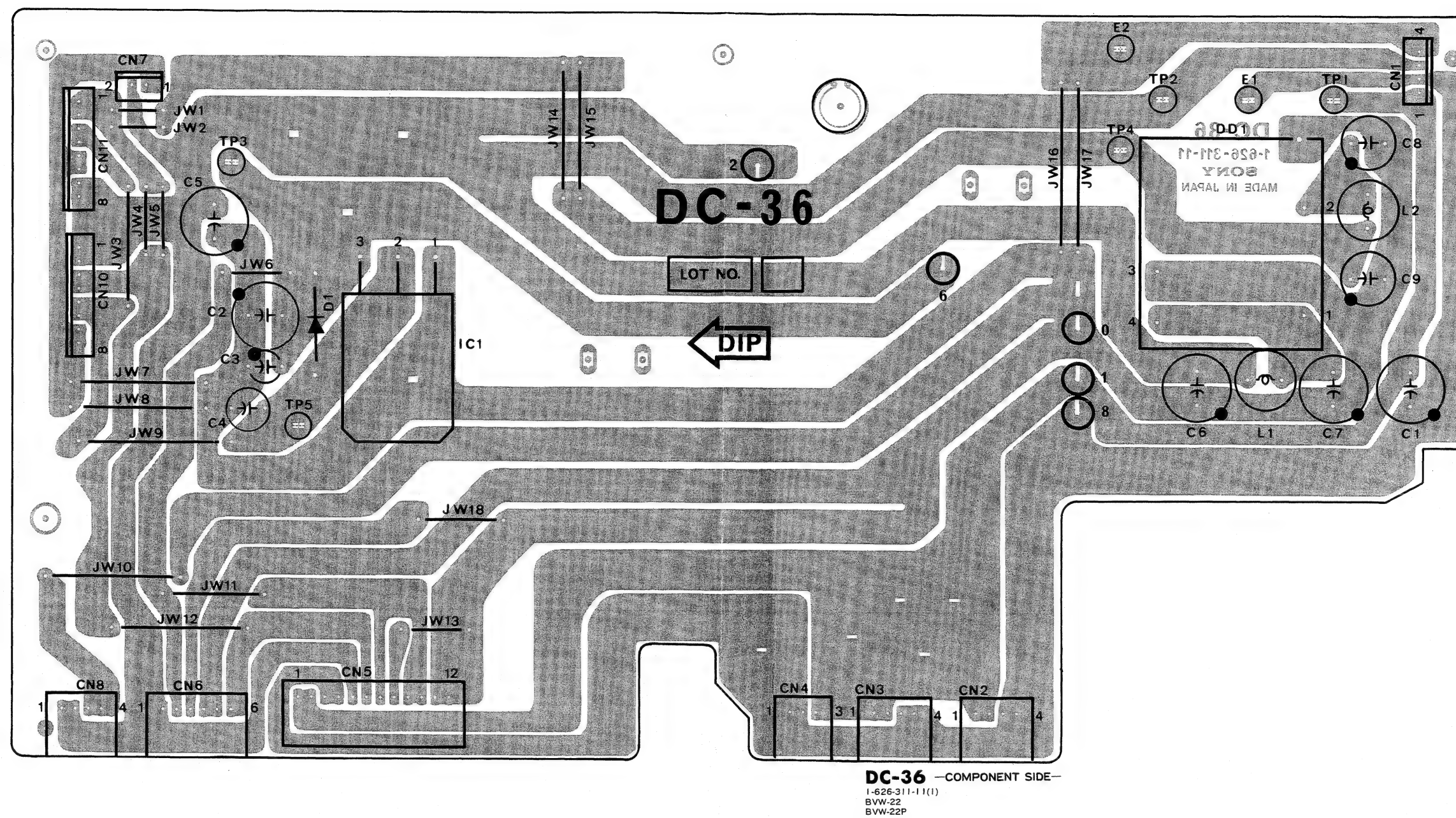
UR-14E —SOLDERING SIDE—
 I-413-249-12(1)
 BVW-22P

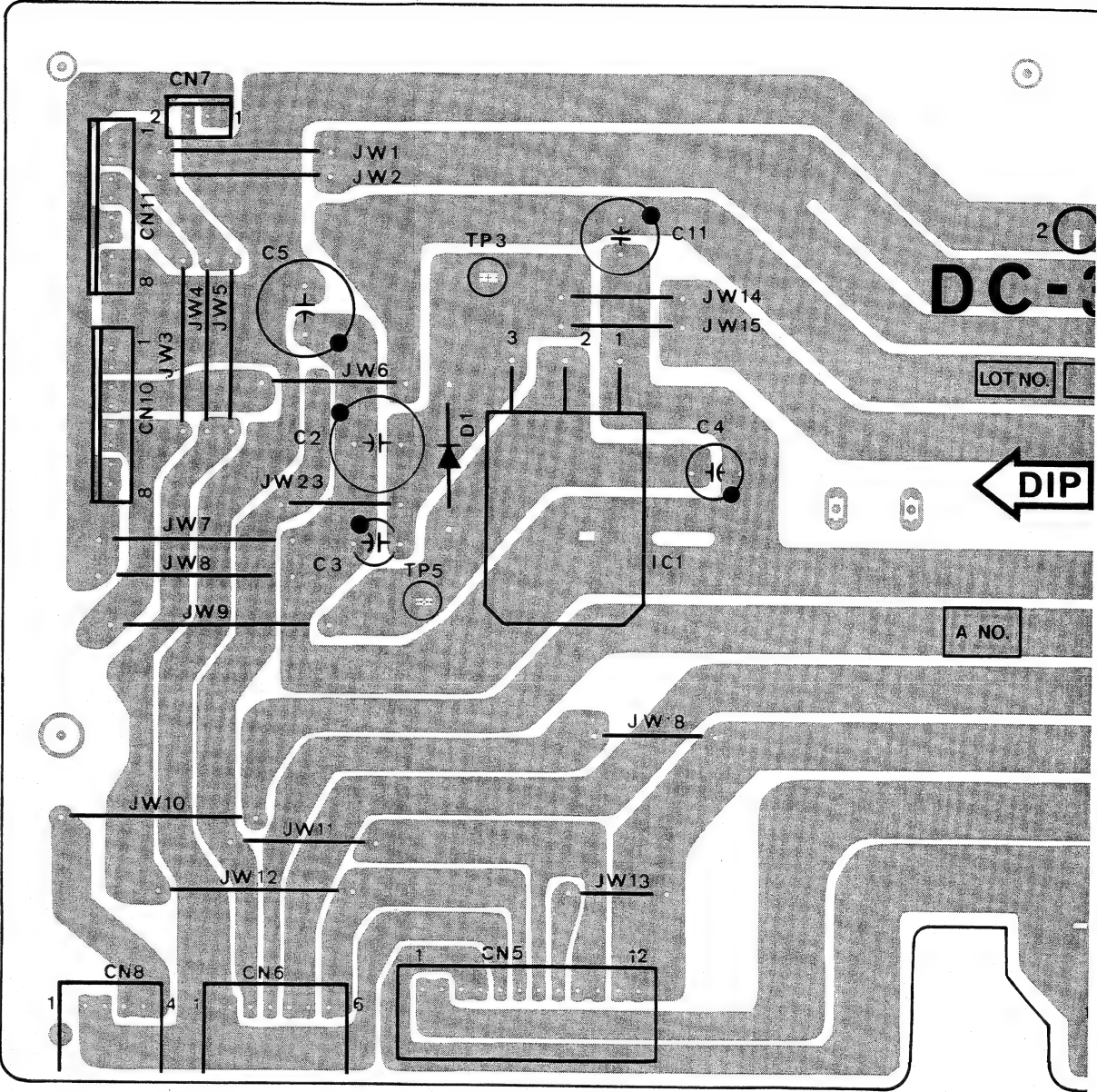
E
C
B

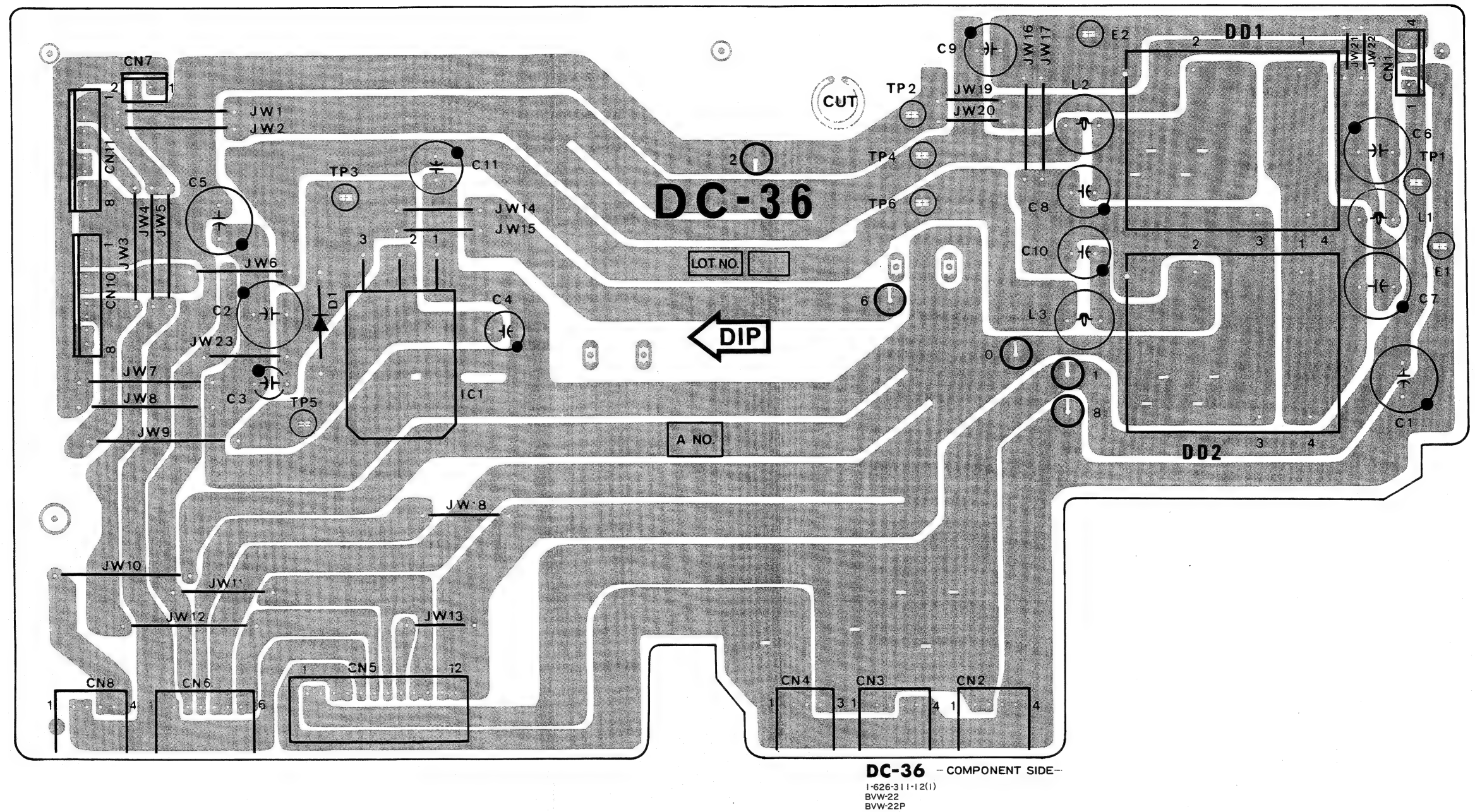
B C E
O O O



DC-36; DC SUPPLY S/N UP TO 11057 (EK)








SECTION 17 SPARE PARTS AND FIXTURE

17-1. PARTS INFORMATION

- (1)

The shaded and -marked components are critical to safety. Replace only with same components as specified.
- (2) Replacement Parts supplied from the Sony Parts Center will sometimes have a different shape from the original parts. This is due to "improved parts and/or engineering changes" or "standardization of genuine parts". This manual's exploded views and electrical spare parts list indicate the part numbers of "the standardized genuine parts at the present". Regarding engineering part changes by the engineering department, refer to Sony service bulletins and service manual supplements.
- (3) The parts marked with "s" in the SP column of the exploded views and electrical spare parts list are normally stocked for replacement purposes. The parts marked with "o" in the SP column are not normally required for routine service work. Orders for parts marked with "o" will be processed, but allow for additional delivery time.
- (4) Items with no part number and/or no description are not stocked because they are seldom required for routine service.
- (5) (T) after a spring description is shown on the exploded views in order to indicate the number of spring turns required for use. (Example)
Spring, tension (24T); This spring must be cut at its 24th turn for actual use.

- (6) Parts that are not listed in the "Reference Numbers Order List" are shown in the General Purpose Electrical List. Reference numbers are omitted.

All capacitors are in micro farads unless otherwise specified.

All inductors are in micro henries unless otherwise specified.

All resistors are in ohms.

PARTS CHANGE INFORMATION

In this parts list, **) marked parts are design-changed. Applicable Serial No. are as follows.

- 1) marked parts are for Serial No. up to 10188.
- 2) marked parts are for Serial No. 10189 and higher.
- 3) marked parts are for Serial No. up to 10228.
- 4) marked parts are for Serial No. 10229 and higher.
- 5) marked parts are for Serial No. up to 10363.
- 6) marked parts are for Serial No. 10364 and higher.
- 7) marked parts are for Serial No. up to 10573.
- 8) marked parts are for Serial No. 10574 and higher.
- 9) marked parts are for Serial No. up to 10733.
- 10) marked parts are for Serial No. 10734 and higher.
- 11) marked parts are for Serial No. up to 10949.
- 12) marked parts are for Serial No. 10950 and higher.

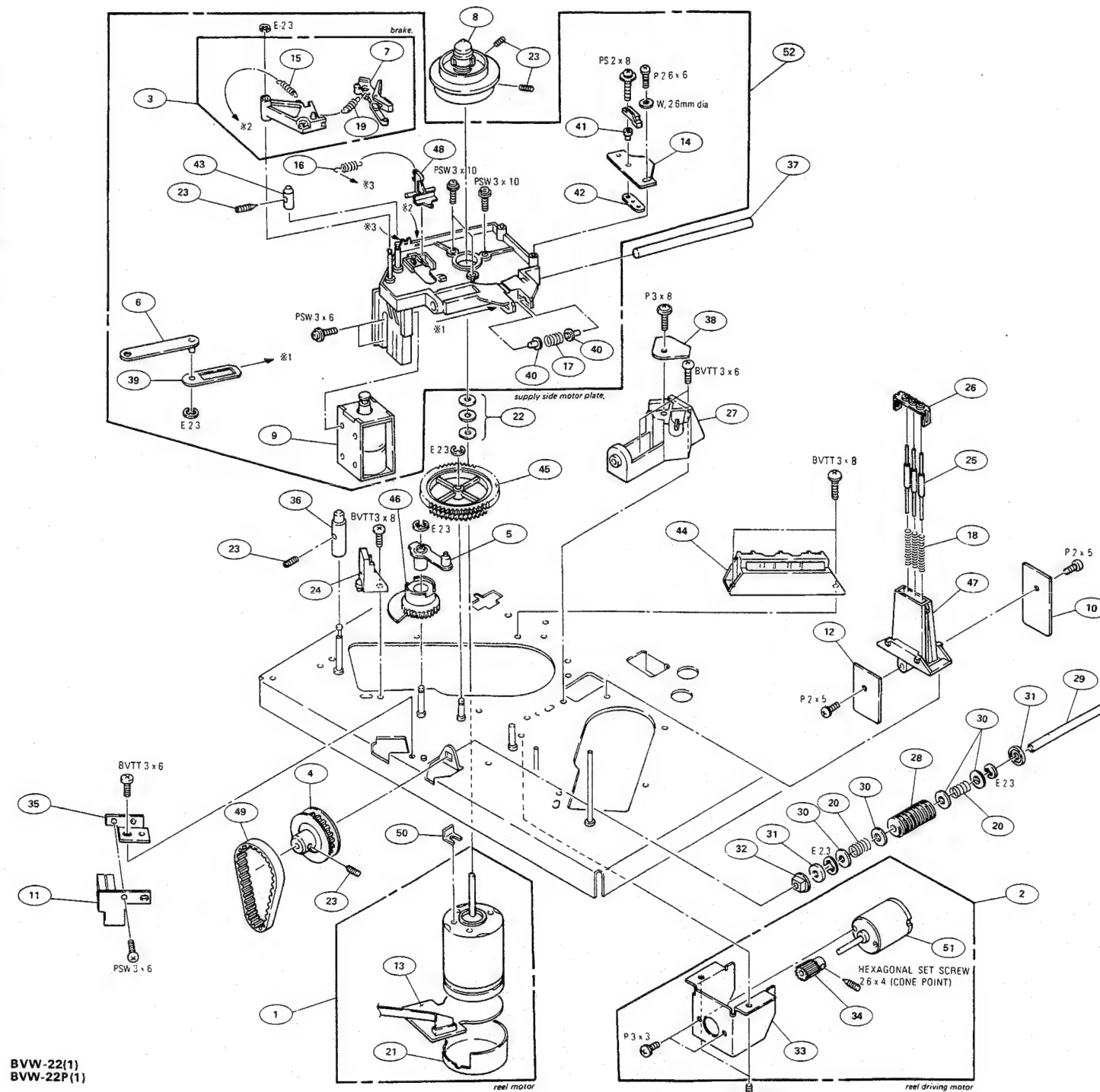
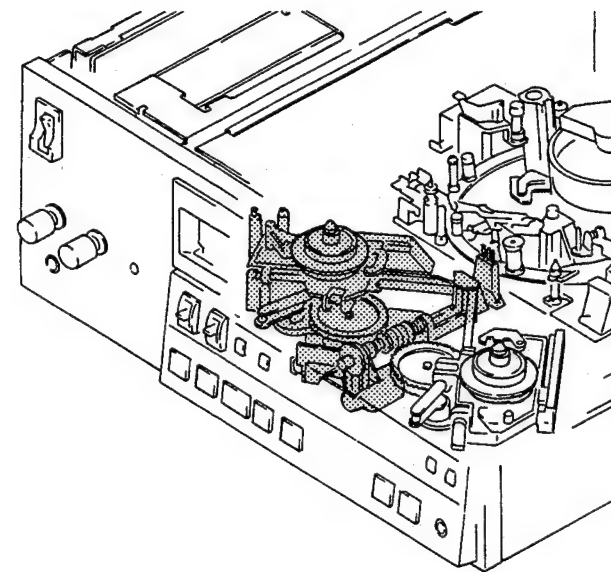
- 13) marked parts are for Serial No. up to 11057.
- 14) marked parts are for Serial No. 11058 and higher.
- 15) marked parts are for Serial No. up to 11142.
- 16) marked parts are for Serial No. 11143 and higher.
- 17) marked parts are for Serial No. up to 11172.
- 18) marked parts are for Serial No. 11173 and higher.
- 19) marked parts are for Serial No. up to 11465.
- 20) marked parts are for Serial No. 11466 and higher.

17-2. EXPLODED VIEW

. Exploded views are composed of the following blocks.

1. Supply Side Reel Chassis
 - supply reel table
 - supply motor plate
 - reel motor
 - reel drive motor
 - cassette detector
2. Take-up Side Reel Chassis
 - take-up reel table
 - take-up motor plate
 - reel motor
 - cassette detector
3. Head Drum, Stationary Heads and Tape Guides Block
 - head drum ass'y
 - CTL head
 - TG-0 ass'y
 - audio/TC head
 - tape guide
 - capstan motor
 - slip ring
4. Threading Ring Block
 - threading ring
 - pinch roller
 - tape guide
 - ring sensor
5. T Drawer Arm Block
 - T drawer arm
 - tape beginning sensor
6. Supply Tension Regulator Block
 - supply tension regulator
7. Pinch Press Mechanism Block
 - pinch press mechanism
8. Gear Box Block
 - gear box
9. Function Control Panel Block
 - function control panel
10. SC Guide Block
 - SC guide
11. Cassette-up Compartment Block
 - cassette-up compartment
12. Rear Panel Block
 - connector
 - switching regulator
13. Printed Circuit Board Block (1)
 - printed circuit board
14. Printed Circuit Board Block (2)
 - printed circuit board
15. Ornamental Panel Block
 - U case
 - bottom panel

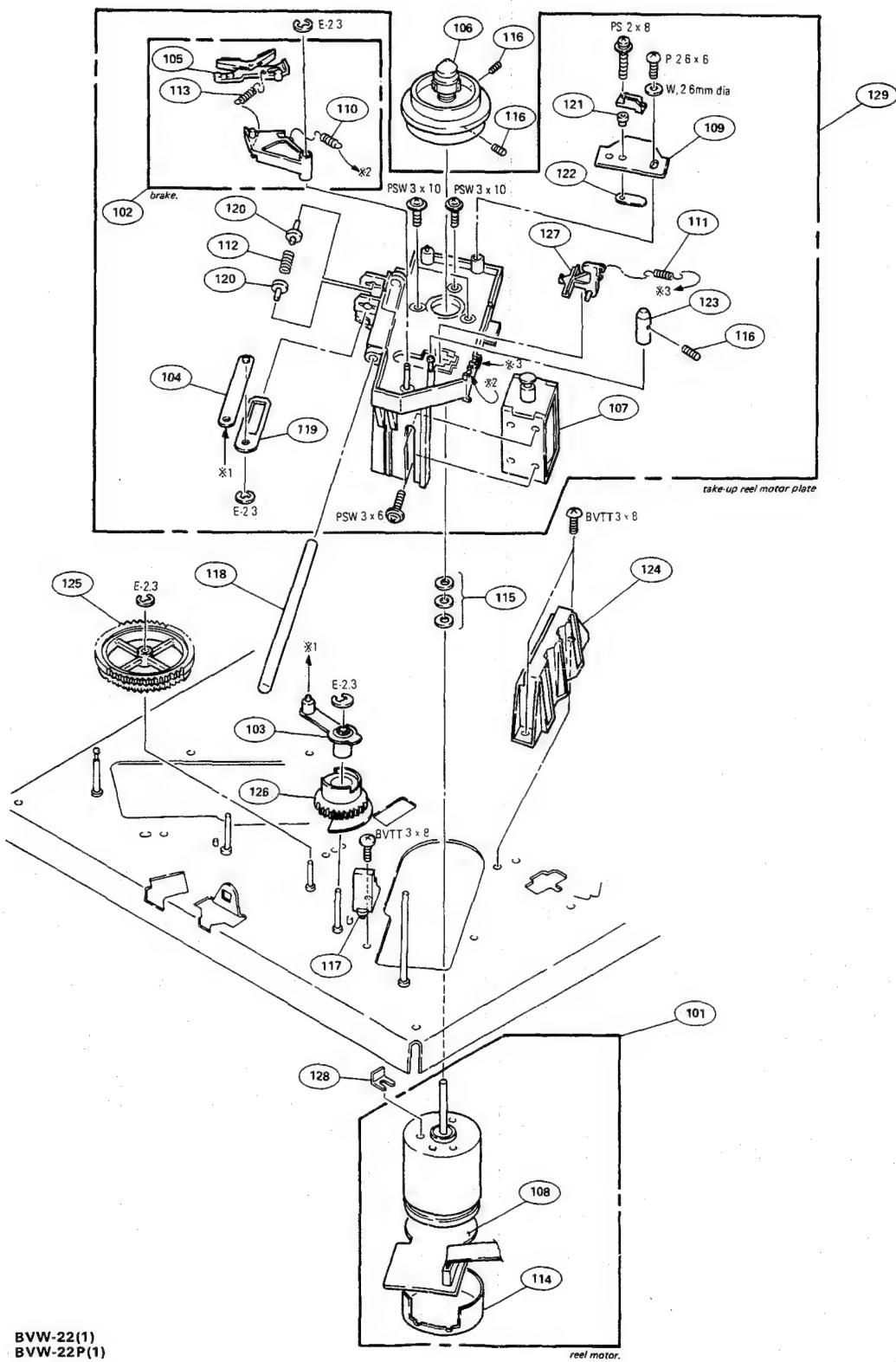
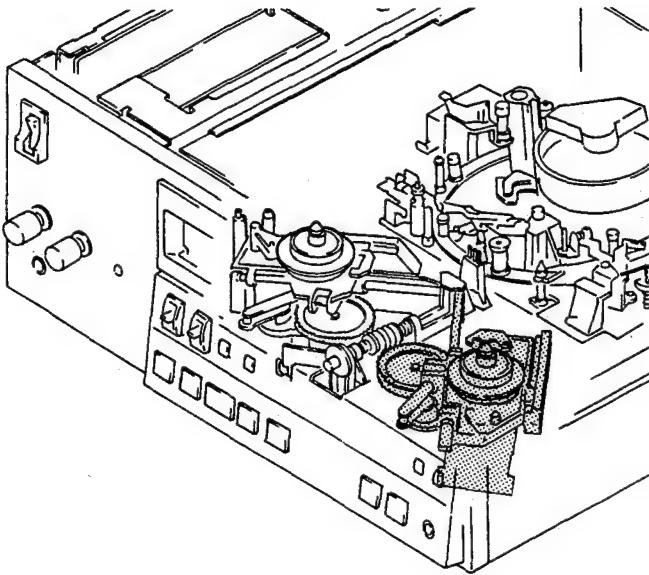
Supply Side Reel Chassis



BVW-22(1)
BVW-22P(1)

No.	Parts No.	SP	Description
1	A-6737-175-A	s	MOTOR ASS'Y, REEL
2	A-6737-192-A	o	MOTOR ASS'Y, REEL DRIVING
3	A-6741-066-A	o	BRAKE ASS'Y
4	X-3717-201-1	o	PULLEY (L) ASS'Y, TIMING
5	X-3717-202-1	o	ARM ASS'Y, CRANK
6	X-3717-204-1	o	ARM (B) ASS'Y, CRANK
7	X-3717-205-1	s	LINING ASS'Y
8	X-3717-207-1	s	TABLE ASS'Y, REEL
9	1-454-417-41	s	SOLENOID, PLUNGER
10	1-622-598-11	o	PRINTED CIRCUIT BOARD, PTC-20
11	1-622-599-11	o	PRINTED CIRCUIT BOARD, PTC-21
12	1-622-601-11	o	PRINTED CIRCUIT BOARD, PTC-36
13	1-622-605-11	o	PRINTED CIRCUIT BOARD, RM-40
14	1-622-606-11	o	PRINTED CIRCUIT BOARD, DE-15
15	3-307-381-00	s	SPRING, TENSION
16	3-464-103-XX	s	SPRING TENSION (GT)
17	3-491-247-00	s	SPRING, COMPRESSION
18	3-554-202-00	o	SPRING, COMPRESSION
19	3-648-217-00	o	SPRING TENSION
20	3-659-324-00	s	SPRING, COMPRESSION
21	3-675-826-00	o	COVER, SHIELD, RM
22	3-701-441-01	s	WASHER, POLY 4MM DIA. 0.13T
	3-701-441-11	s	WASHER, POLY 4MM DIA. 0.25T
	3-701-441-21	s	WASHER, POLY 4MM DIA. 0.5T
23	3-701-506-01	s	SET SCREW, DOUBLE POINT 3 x 4
24	3-717-205-01	o	HOLDER (B), SHAFT
25	3-717-206-01	s	LEVER, M/C DETECTION
26	3-717-207-01	o	COVER, M/C DETECTION HOLDER
27	3-717-208-01	o	HOLDER (A), SHAFT
28	3-717-210-01	s	WORM
29	3-717-211-01	o	SHAFT, WORM
30	3-717-212-01	o	WASHER (B), WORM
31	3-717-213-01	o	WASHER (A), WORM
32	3-717-214-01	o	BEARING, WORM
33	3-717-219-01	o	BRACKET, MOTOR
34	3-717-220-01	o	PULLEY (S), TIMING
35	3-717-221-01	o	BRACKET, PTC-21
36	3-717-222-01	s	CAP (L), CS SHAFT
37	3-717-223-01	s	SHAFT, SLIDE
38	3-717-224-01	s	RETAINER, SHAFT, SLIDE
39	3-717-230-01	o	BRACKET, LIMITER
40	3-717-231-01	o	HOLDER, LIMITER
41	3-717-232-01	o	SHAFT, FITTING, MR SENSOR
42	3-717-233-01	o	BRACKET, DE-15
43	3-717-266-01	o	CAP (S), CG SHAFT
44	3-717-398-01	o	TABLE, SLIDE
45	3-717-399-01	s	WHEEL, W
46	3-717-400-01	s	GEAR, CRANK FLAT
47	3-717-426-01	s	HOLDER, M/C DETECTION
48	3-717-450-01	o	ARM, BRAKE RELEASE
49	3-717-542-01	s	BELT, TIMING
50	3-717-625-01	s	SPACER
51	8-835-179-01	s	MOTOR, DC MCB2B15
52	A-6737-174-A	s	PLATE (S) ASSY, MOTOR

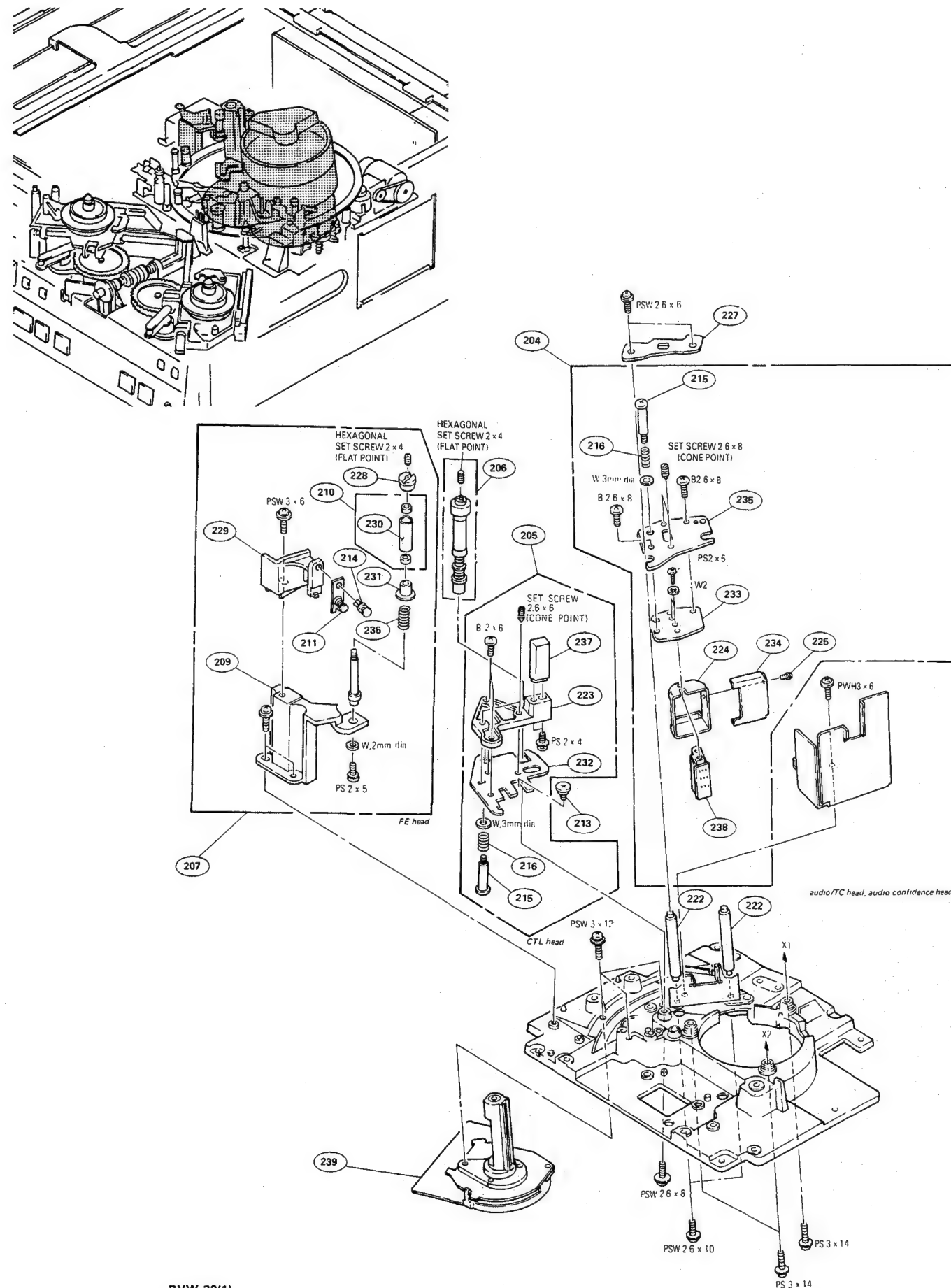
Take-up Side Reel Chassis



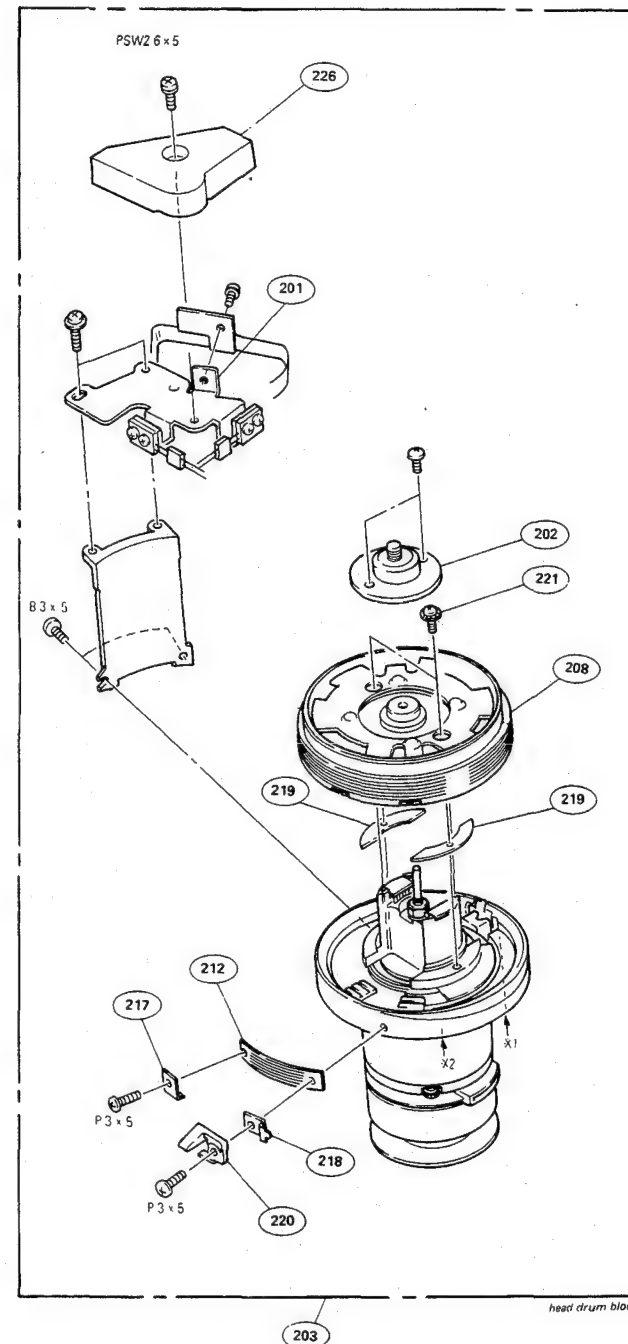
No.	Parts No.	SP	Description
101	A-6737-175-A	s	MOTOR ASS'Y, REEL
102	A-6741-066-A	o	BRAKE ASS'Y
103	X-3717-202-1	o	ARM ASS'Y, CRANK
104	X-3717-204-1	o	ARM (B) ASS'Y, CRANK
105	X-3717-205-1	s	LINING ASS'Y
106	X-3717-207-1	s	TABLE ASS'Y, REEL
107	1-454-417-41	s	SOLENOID, PLUNGER
108	1-622-605-11	o	PRINTED CIRCUIT BOARD, RM-40
109	1-622-606-11	o	PRINTED CIRCUIT BOARD, DE-15
110	3-307-381-00	s	SPRING, TENSION
111	3-464-103-XX	s	SPRING, TENSION (6T)
112	3-491-247-00	s	SPRING, COMPRESSION
113	3-648-217-01	o	SPRING, TENSION
114	3-675-826-00	o	COVER, SHIELD, RM
115	3-701-441-01	s	WASHER, POLY 4MM DIA. 0.13T
	3-701-441-11	s	WASHER, POLY 4MM DIA. 0.25T
	3-701-441-21	s	WASHER, POLY 4MM DIA. 0.5T
116	3-701-506-01	s	SET SCREW, DOUBLE POINT 3 x 4
117	3-717-205-01	o	HOLDER (B), SHAFT
118	3-717-223-01	s	SHAFT, SLIDE
119	3-717-230-01	o	BRACKET, LIMITER
120	3-717-231-01	o	HOLDER, LIMITER
121	3-717-232-01	o	SHAFT, FITTING, MR SENSOR
122	3-717-233-01	o	BRACKET, DE-15
123	3-717-266-01	o	CAP (S), CG SHAFT
124	3-717-398-01	o	TABLE, SLIDE
125	3-717-399-01	s	WHEEL, W
126	3-717-400-01	s	GEAR, CRANK FLAT
127	3-717-450-01	o	ARM, BRAKE RELEASE
128	3-717-625-01	s	SPACER
129	A-6737-176-A	s	PLATE (T) ASSY, MOTOR

BVW-22(1)
BVW-22P(1)

Head Drum, Stationary Heads and Tape Guides Block



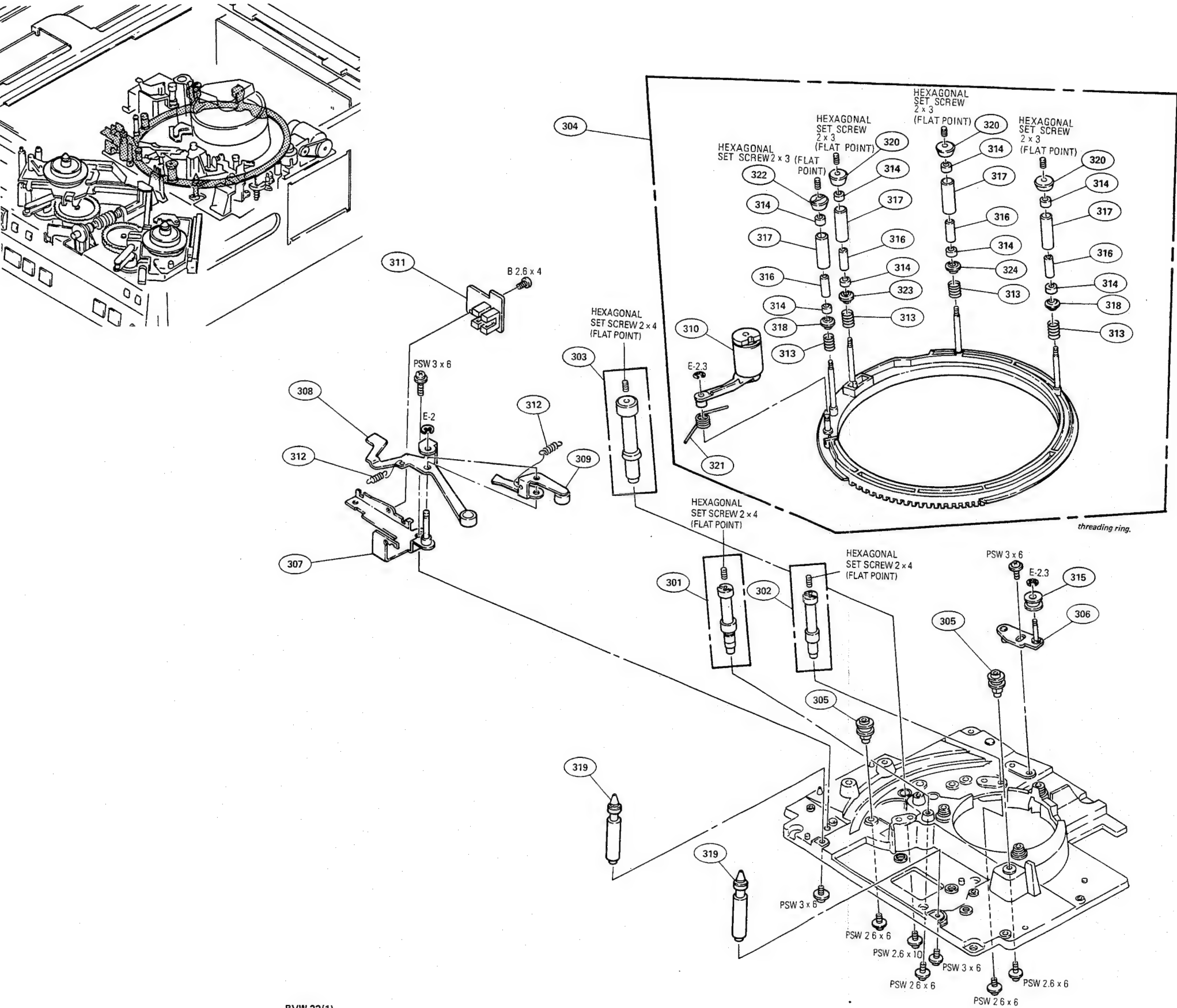
BVW-22(1)
BVW-22P(1)



No.	Parts No.	SP	Description
201	A-6050-575-A	s	BRUSH ASS'Y
202	A-6050-576-A	s	RING ASS'Y, SLIP
203	A-6050-581-A	s	HEAD DRUM ASS'Y, DBH-11A-R (for J, UC)
	A-6050-582-A	s	HEAD DRUM ASS'Y, DBH-12A-R (for EK)
204	A-6736-081-A	o	HEAD ASS'Y, AU
205	A-6736-082-A	o	HEAD ASS'Y, CTL
206	A-6746-027-C	s	ROLLER (TG IN) ASS'Y, TAPE
207	A-6746-053-A	o	TG-0 ASS'Y
208	A-6762-376-A	s	UPPER DRUM ASS'Y, DBR-11-R (for J, UC)
	A-6762-377-A	s	UPPER DRUM ASS'Y, DBR-12-R (for EK)
209	X-3717-292-1	o	DECK ASS'Y, TG-0
210	X-3717-299-1	s	ROLLER ASS'Y, GUIDE
211	1-543-316-21	s	HEAD, SENSING (SMALL TYPE)
212	1-586-633-00	s	DETECTOR, DEW
213	2-236-956-00	s	SCREW, STEP
214	2-279-715-01	s	RIVET, NYLON
215	3-437-173-02	o	SCREW, HEAD ADJUSTING
216	3-653-350-00	s	SPRING, COMPRESSION
217	3-655-631-00	o	TERMINAL, GROUND
218	3-675-701-00	o	TERMINAL BOARD
219	3-675-708-01	s	SPACER, FLANGE (T=0.01 MM)
	3-675-708-11	s	SPACER, FLANGE (T=0.03 MM)
	3-675-708-21	s	SPACER, FLANGE (T=0.5 MM)
	3-675-708-31	s	SPACER, FLANGE (T=0.1 MM)
220	3-675-739-00	o	SPACER, INSULATING (2)
221	3-675-740-00	o	EXT TOOTH (W) (MIDDLE), 2.6X8
222	3-675-804-02	o	BRACKET, ADJUSTMENT PLATE
223	3-675-842-00	o	PLATE, ADJUSTMENT, CTL
224	3-698-731-01	o	PLATE, SHIELD, FRONT
225	3-703-502-41	s	SCREW
226	3-717-199-01	o	COVER, BRUSH
227	3-717-243-03	o	PLATE, ADJUSTMENT, AT HEAD
228	3-717-267-01	s	FLANGE, UPPER
229	3-717-272-01	o	HOLDER, S SENSOR
230	3-717-292-01	s	ROLLER, GUIDE
231	3-717-293-01	s	FLANGE, LOWER
232	3-717-522-01	o	BASE, CTL HEAD
233	3-717-650-02	o	BRACKET (P), HEAD
234	3-717-651-01	o	CASE (P), SHIELD
235	3-717-652-01	o	DECK (P), HEAD
236	4-879-762-00	s	SPRING, COMPRESSION
237	8-825-554-73	s	HEAD, CTL PS244-21A
238	8-825-771-11	s	HEAD AUDIO CONF. PS244-2103C
239	8-835-259-02	s	MOTOR, DC BIF-1918A

THREADING RING THREADING RING

Threading Ring Block

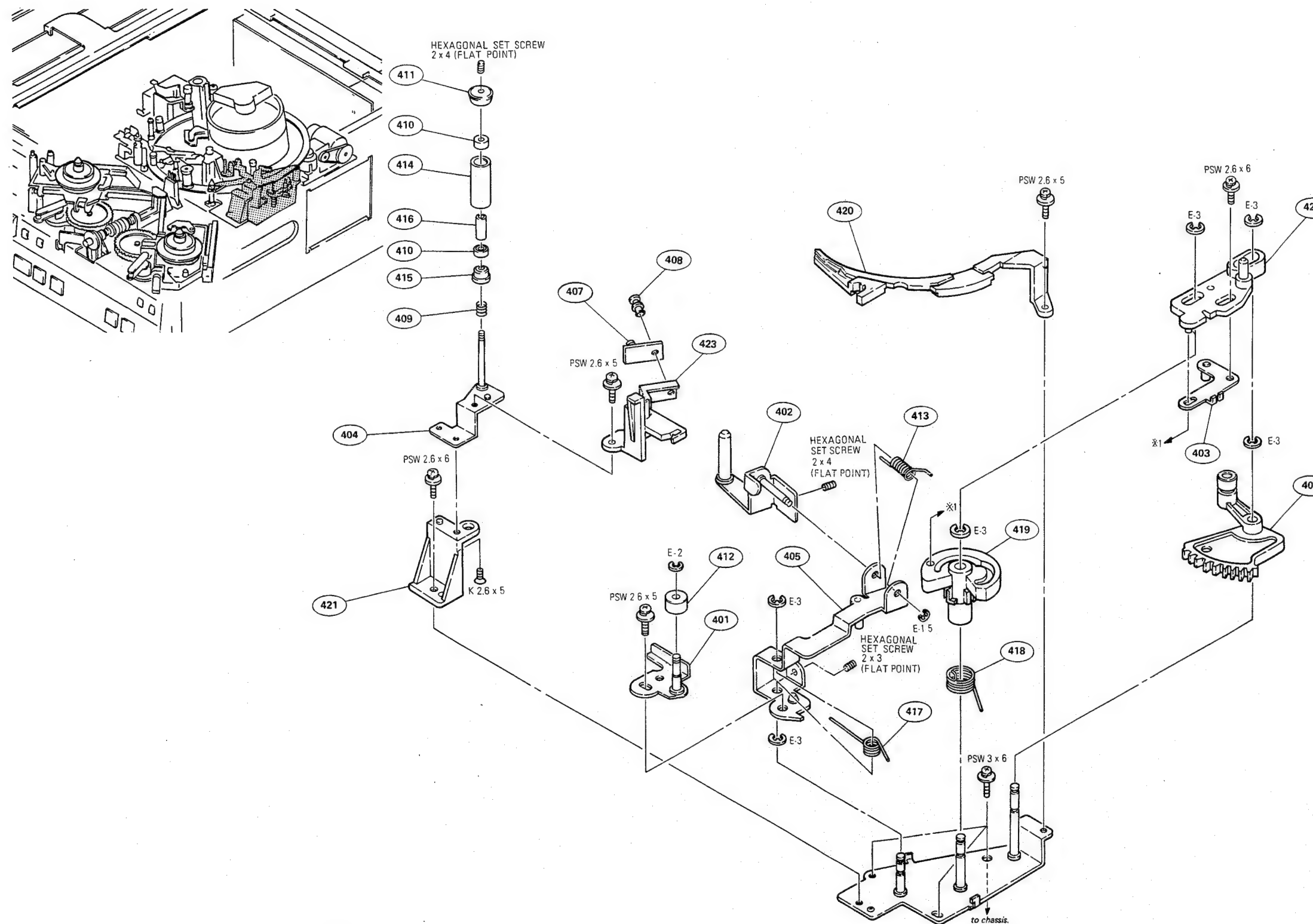


No.	Parts No.	SP	Description
301	A-6746-028-C	s	ROLLER (TG2) ASS'Y, TAPE
302	A-6746-029-C	s	ROLLER (TG3) ASS'Y, TAPE
303	A-6746-030-C	s	ROLLER (TG4) ASS'Y, TAPE
304	A-6750-214-C	o	RING ASS'Y, LOADING
305	X-3675-809-0	o	ROLLER (A) ASS'Y, RING
306	X-3717-208-1	o	ROLLER (B) SUB ASS'Y, RING
307	X-3717-210-1	o	BRACKET ASS'Y, RING SENSOR
308	X-3717-211-1	o	LEVER ASS'Y, TH END
309	X-3717-212-1	o	LEVER ASS'Y, TH.B END
310	X-3717-215-2	s	ARM ASS'Y, PINCH ROLLER
311	1-622-597-11	o	PRINTED CIRCUIT BOARD, PTC-15
312	3-533-373-00	s	SPRING, TENSION
313	3-637-331-00	s	SPRING, COMPRESSION (L)
314	3-650-312-00	s	BEARING, BALL (NO FLANGE)
315	3-675-866-00	o	ROLLER, RING
316	3-680-809-00	s	RETAINER, BEARING
317	3-680-810-00	s	ROLLER
318	3-680-812-00	s	FLANGE, LOWER
319	3-717-242-01	o	SHAFT, CG
320	3-717-267-01	s	FLANGE, UPPER
321	3-717-268-01	s	SPRING
322	3-717-269-01	s	FLANGE, PRECEDING GUIDE
323	3-717-270-01	s	FLANGE (A), LOWER
324	3-717-271-01	s	FLANGE (B), LOWER

BVW-22(1)
BVW-22P(1)

T DRAWER ARM T DRAWER ARM

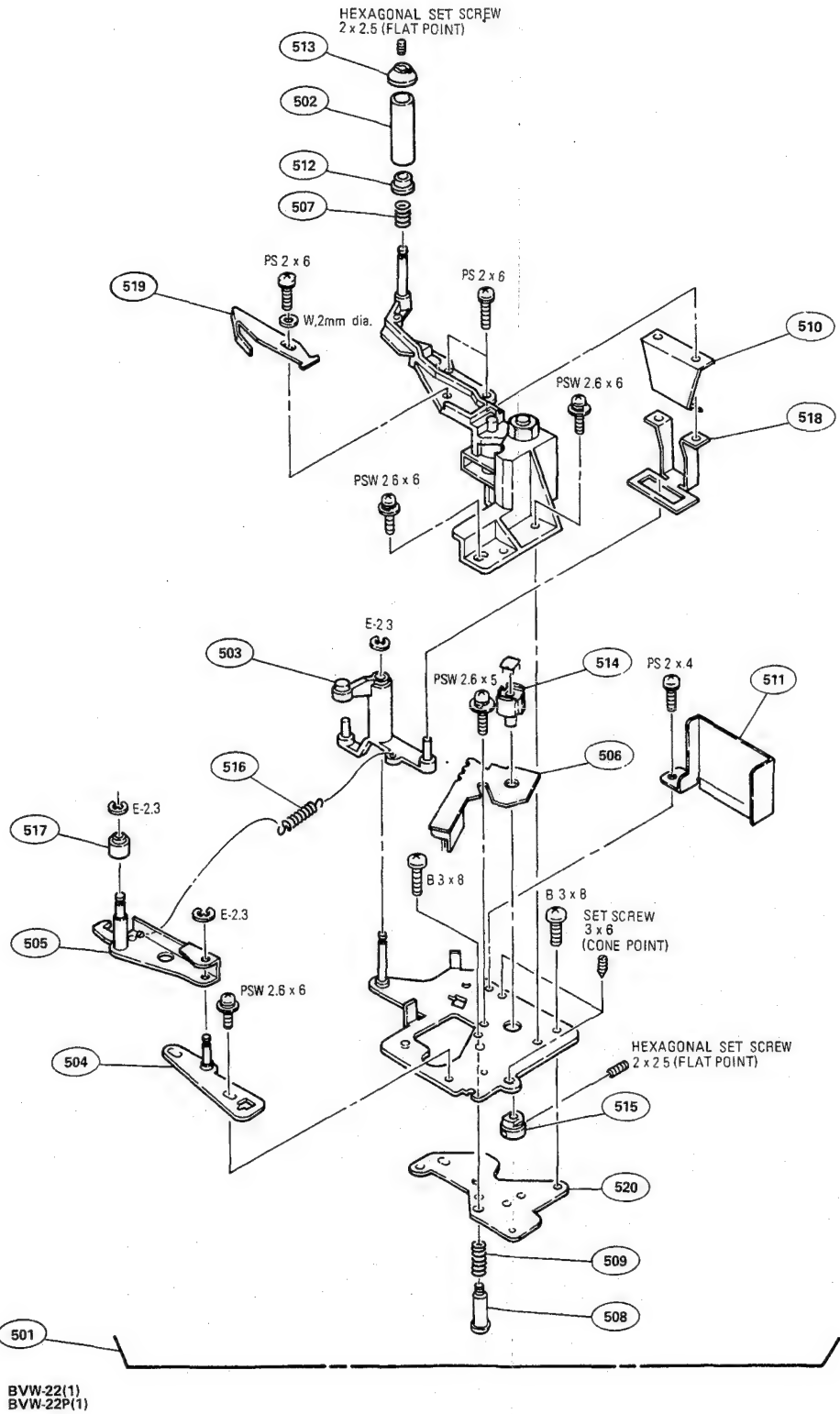
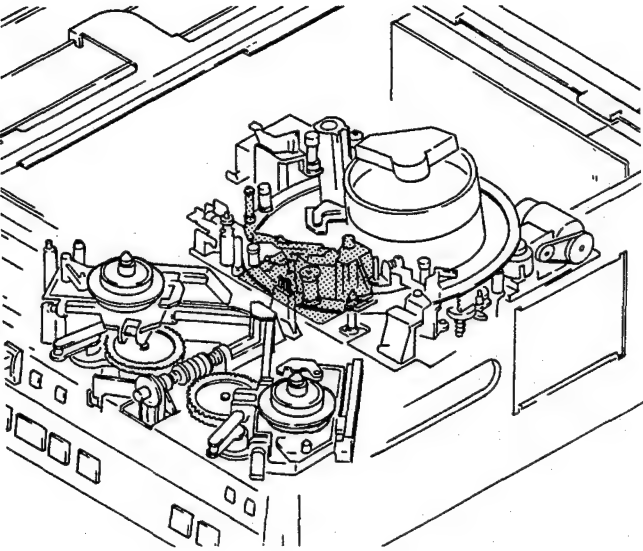
T Drawer Arm Block



BVW-22(1)
BVW-22P(1)

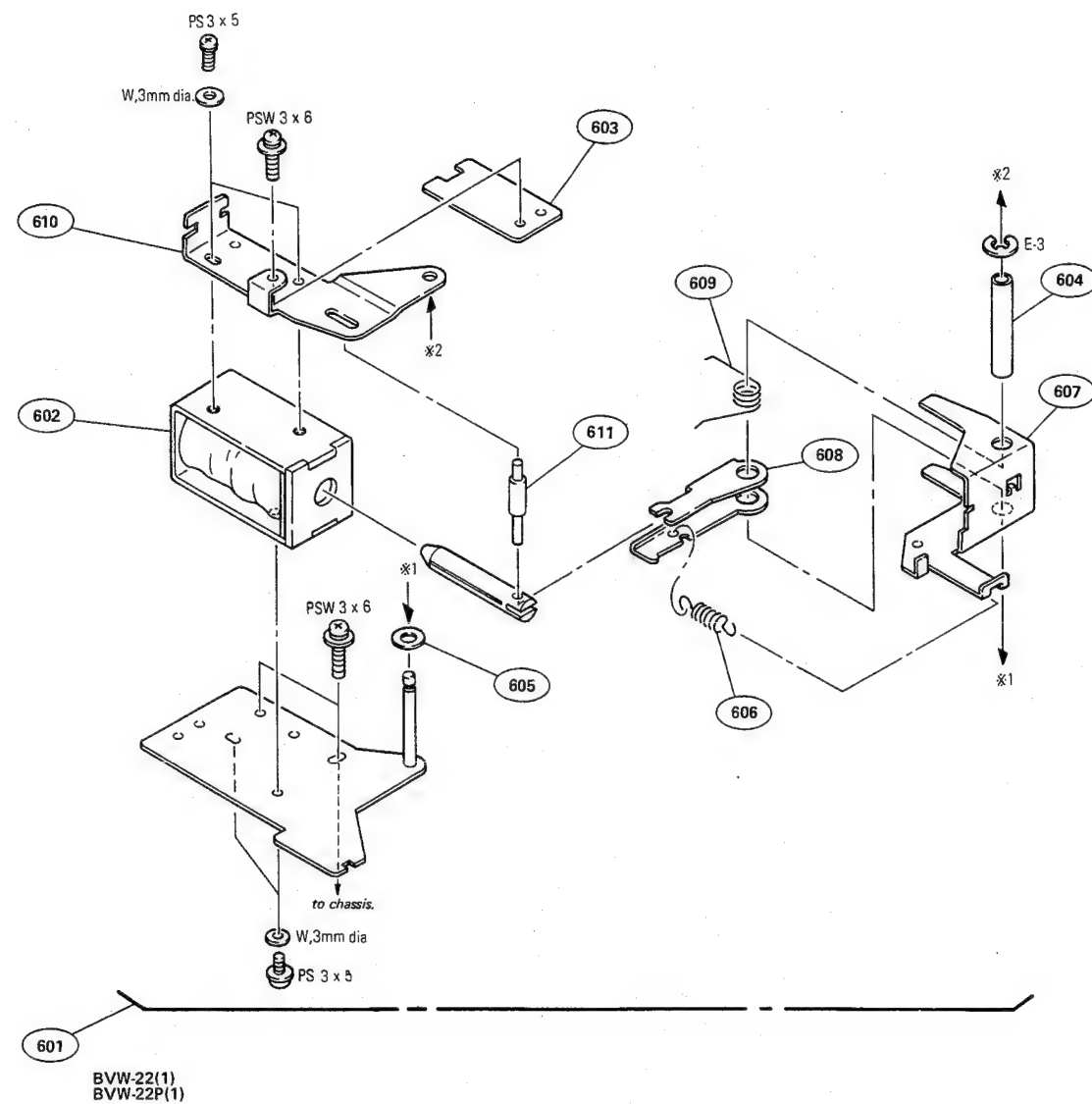
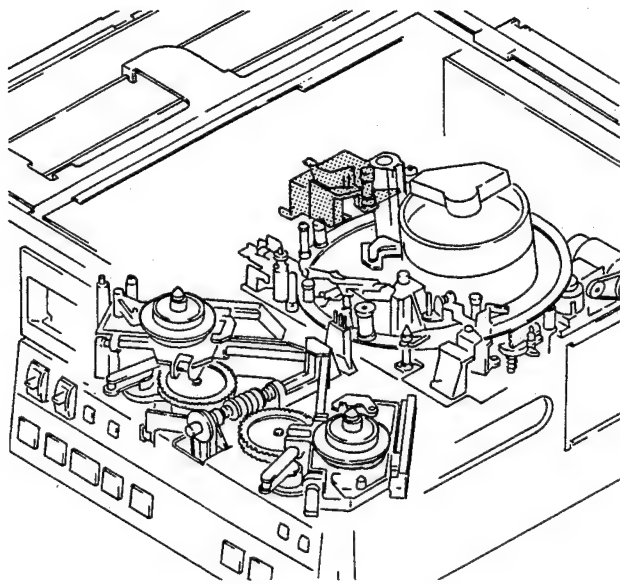
No.	Parts No.	SP	Description
401	X-3717-221-1	o	PLATE ASS'Y, ADJUSTMENT
402	X-3717-222-1	s	GUIDE ASS'Y, SLANT
403	X-3717-223-1	o	PLATE ASS'Y, ADJUSTMENT, SLANT
404	X-3717-224-1	o	BASE ASS'Y, T ROLLER
405	X-3717-239-1	o	ARM ASS'Y, T
406	X-3717-250-1	o	GEAR (1) ASS'Y, T
407	1-543-316-21	s	HEAD, SENSING (SMALL TYPE)
408	2-279-715-01	s	RIVET, NYLON
409	2-618-901-00	o	SPRING
410	3-650-312-00	s	BEARING, BALL (NO FLANGE)
411	3-717-267-01	s	FLANGE, UPPER
412	3-717-283-01	o	ROLLER (2)
413	3-717-284-01	o	SPRING (SLANT GUIDE)
414	3-717-292-01	s	ROLLER, GUIDE
415	3-717-293-01	s	FLANGE, LOWER
416	3-717-294-01	o	RETAINER, BEARING
417	3-717-299-01	o	SPRING
418	3-717-300-01	o	SPRING (T GEAR 2)
419	3-717-406-01	o	GEAR (2), T
420	3-717-407-03	s	RETAINER, PINCH
421	3-717-524-01	o	BRACKET, T ROLLER ASS'Y
422	3-717-536-01	o	SLIDER
423	3-717-537-01	o	HOLDER, SENSOR

Supply Tension Regulator Block



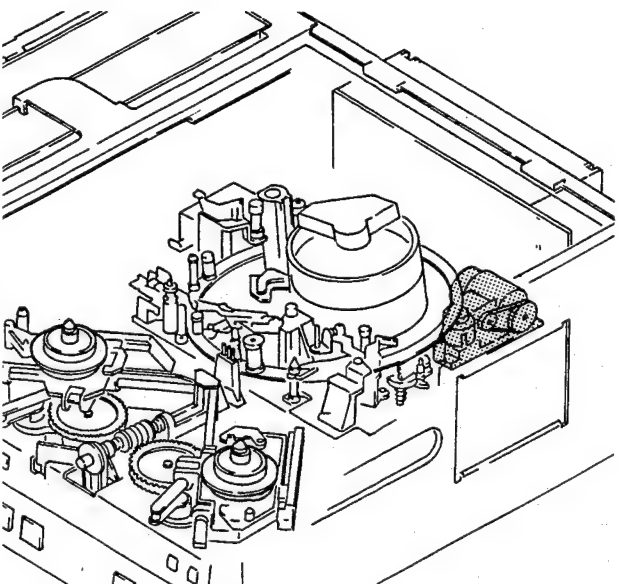
No.	Parts No.	SP	Description
501	A-6742-061-A	s	ARM ASS'Y, S TENSION
502	X-3875-851-0	s	ROLLER ASS'Y, TR
503	X-3717-218-1	o	ARM ASS'Y, RETURN
504	X-3717-219-1	o	HOOK ASS'Y, TENSION REGULATOR
505	X-3717-220-1	o	ARM ASS'Y, TENSION REGULATOR
506	1-611-279-13	o	PRINTED CIRCUIT BOARD, TR-18
507	2-618-901-00	o	SPRING
508	3-437-173-02	o	SCREW, HEAD ADJUSTING
509	3-653-350-00	s	SPRING, COMPRESSION
510	3-675-872-00	o	SPRING, LEAF
511	3-675-885-02	o	PLATE, SHIELD, T-DME
512	3-677-749-03	s	RETAINER, B
513	3-677-752-00	s	NUT, ADJUSTMENT, T
514	3-680-830-01	s	HOLDER, DME
515	3-680-831-00	o	COLLAR, DME
516	3-680-880-01	s	SPRING, TENSION (POWER TENSION)
517	3-717-253-01	s	ROLLER
518	3-717-276-01	o	PROTECTOR
519	3-717-277-01	o	PLATE, ADJUSTMENT, RETURN
520	3-717-278-01	o	BRACKET, TR

Pinch Press Mechanism Block

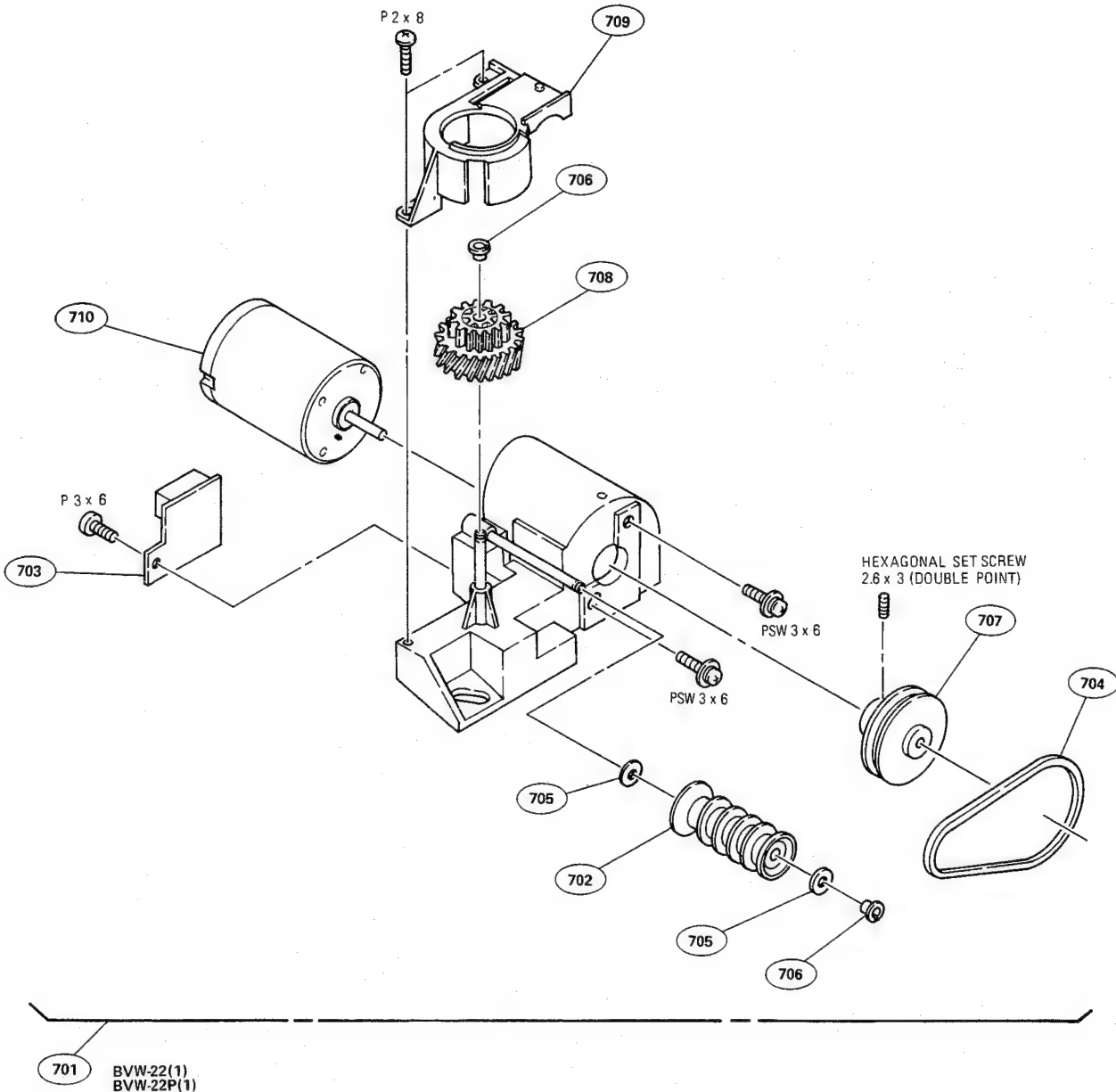
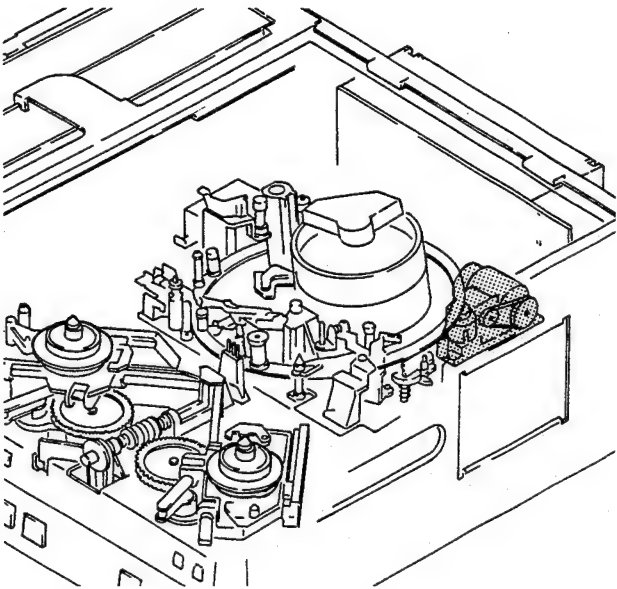
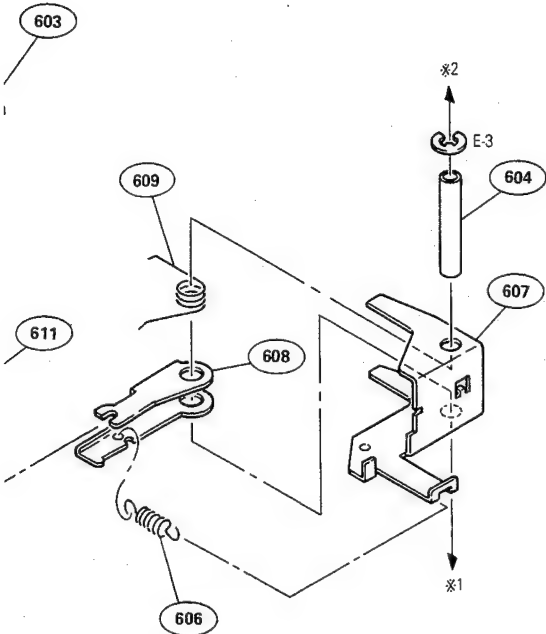


No.	Parts No.	SP	Description
601	A-6749-117-A	o	PRESS ASS'Y, PINCH
602	1-454-338-00	s	SOLENOID, PLUNGER
603	1-622-596-11	o	PRINTED CIRCUIT BOARD, PD-35
604	3-653-382-01	o	SPACER (4 x 25)
605	3-701-441-21	s	WASHER POLY, 4MM DIA. 0.5T
606	3-701-788-XX	s	SPRING, TEMSION (12T)
607	3-717-246-01	o	LEVER, PRESS, P
608	3-717-247-01	o	LIMITER, P
609	3-717-248-01	o	SPRING
610	3-717-249-01	o	STOPPER, P
611	3-717-250-01	o	SHAFT, JOINT, P

Gear Box Block

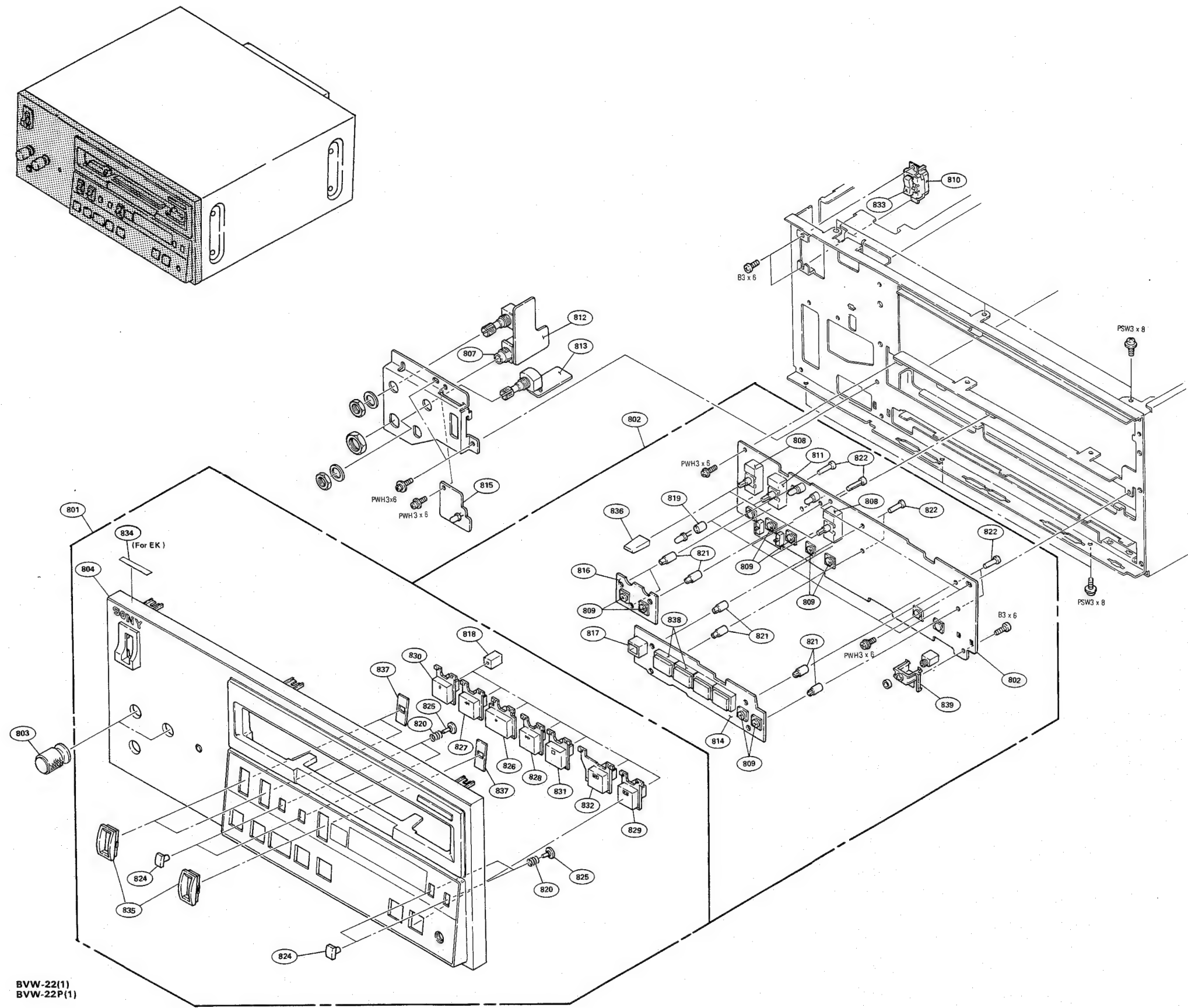


Gear Box Block



No.	Parts No.	SP	Description
701	A-6750-213-A	s	BOX ASS'Y, GEAR
702	X-3717-214-2	s	WORM ASS'Y
703	1-622-607-11	o	PRINTED CIRCUIT BOARD, PTC-31
704	3-688-066-01	s	BELT, LM
705	3-701-439-21	s	WASHER POLY 3MM DIA. 0.5T
706	3-703-074-00	s	CAP 3, SHAFT
707	3-717-261-01	o	PULLEY, MOTOR
708	3-717-262-02	s	GEAR, DRIVE
709	3-717-550-01	o	COVER, GEAR BOX
710	8-835-179-01	s	MOTOR, DC MCB2B15

Function Control Panel Block



BVW-22(1)
BVW-22P(1)

No. Parts No. SP Description

- 801 A-6704-324-A o PANEL BLOCK ASSY, FRONT (for J, UC)
A-6704-338-A o PANEL BLOCK ASSY, FRONT (for EK)
- 802 A-6717-494-A o MOUNTED CIRCUIT BOARD, KY-130
- 803 X-3683-504-0 s KNOB ASSY, CONTROL
- 804 X-3717-322-1 o PANEL ASSY, FRONT (for J, UC)
X-3717-340-1 o PANEL ASSY, FRONT (for EK)
- 805 1-237-719-11 s RES, VAR, CARBON 100K
- 806 1-238-182-11 s RES, VAR, CARBON 20K/20K
- 807 1-507-863-31 s JACK, LARGE TYPE
- 808 1-516-995-00 s SWITCH, LEVER SLIDE
- 809 1-552-539-00 s SWITCH, KEY BOARD

△ 810 1-570-117-41 s SWITCH, ROCKER (AC POWER)

- 811 1-571-116-11 s SWITCH, LEVER SLIDE
- 812 1-626-307-11 o PRINTED CIRCUIT BOARD, HP-38
- 813 1-626-308-11 o PRINTED CIRCUIT BOARD, VR-69
- 814 1-626-315-11 o PRINTED CIRCUIT BOARD, DP-87

- 815 1-626-316-11 o PRINTED CIRCUIT BOARD, LED-58
- 816 1-626-510-11 o PRINTED CIRCUIT BOARD, SW-274
- 817 2-114-405-01 o HOLDER, LED
- 818 2-284-744-00 o CUSHION (B), KEY
- 819 3-305-651-00 o RETAINER, LED

- 820 3-578-221-00 s SPRING, COMPRESSION
- 821 3-659-487-00 s HOLDER, BUZER
- 822 3-659-488-00 s PIN, BUZER HOLDER
- 823 3-668-007-02 s PUSH BUTTON (5X9)
- 824 3-668-007-11 s PUSH BUTTON (5X9)

- 825 3-668-009-02 s PIN, PUSH BUTTON
- 826 3-672-782-02 s KEY TOP (A)
- 827 3-672-783-02 s KEY TOP (B)
- 828 3-672-783-12 s KEY TOP (B)
- 829 3-672-783-22 s KEY TOP (B)

- 830 3-672-783-32 s KEY TOP (B)
- 831 3-672-783-42 s KEY TOP (B)
- 832 3-672-785-02 s KEY TOP (D)
- 833 3-688-814-01 s CAP, SWITCH
- 834 3-701-690-00 s LABEL, MADE IN JAPAN (for EK)

- 835 3-717-374-01 o FRAME (23X12), ORNAMENTAL, SW
- 836 3-717-382-01 s KNOB, LEVER SW
- 837 3-717-613-01 o PLATE, ORNAMENTAL, LSW
- 838 3-725-025-01 o HOLDER, 7-SEG
- 839 3-725-032-01 o HOLDER, SJA

FUNCTION CONTROL, SC GUIDE ASSY

805 1-237-719-11 s RES, VAR, CARBON 100K
806 1-238-182-11 s RES, VAR, CARBON 20K/20K
807 1-507-863-31 s JACK, LARGE TYPE
808 1-516-995-00 s SWITCH, LEVER SLIDE
809 1-552-539-00 s SWITCH, KEY BOARD

811 1-571-116-11 s SWITCH, LEVER SLIDE
812 1-626-307-11 o PRINTED CIRCUIT BOARD, HP-38
813 1-626-308-11 o PRINTED CIRCUIT BOARD, VR-69
814 1-626-315-11 o PRINTED CIRCUIT BOARD, DP-87

820 3-578-221-00 s SPRING, COMPRESSION
821 3-659-487-00 s HOLDER, BUZER
822 3-659-488-00 s PIN, BUZER HOLDER
823 3-668-007-02 s PUSH BUTTON (5X9)
824 3-668-007-11 s PUSH BUTTON (5X9)

835 3-717-374-01 o FRAME (23X12), ORNAMENTAL, SW
836 3-717-382-01 s KNOB, LEVER SW
837 3-717-613-01 o PLATE, ORNAMENTAL, LSW
838 3-725-025-01 o HOLDER, 7-SEG
839 3-725-032-01 o HOLDER, SJA

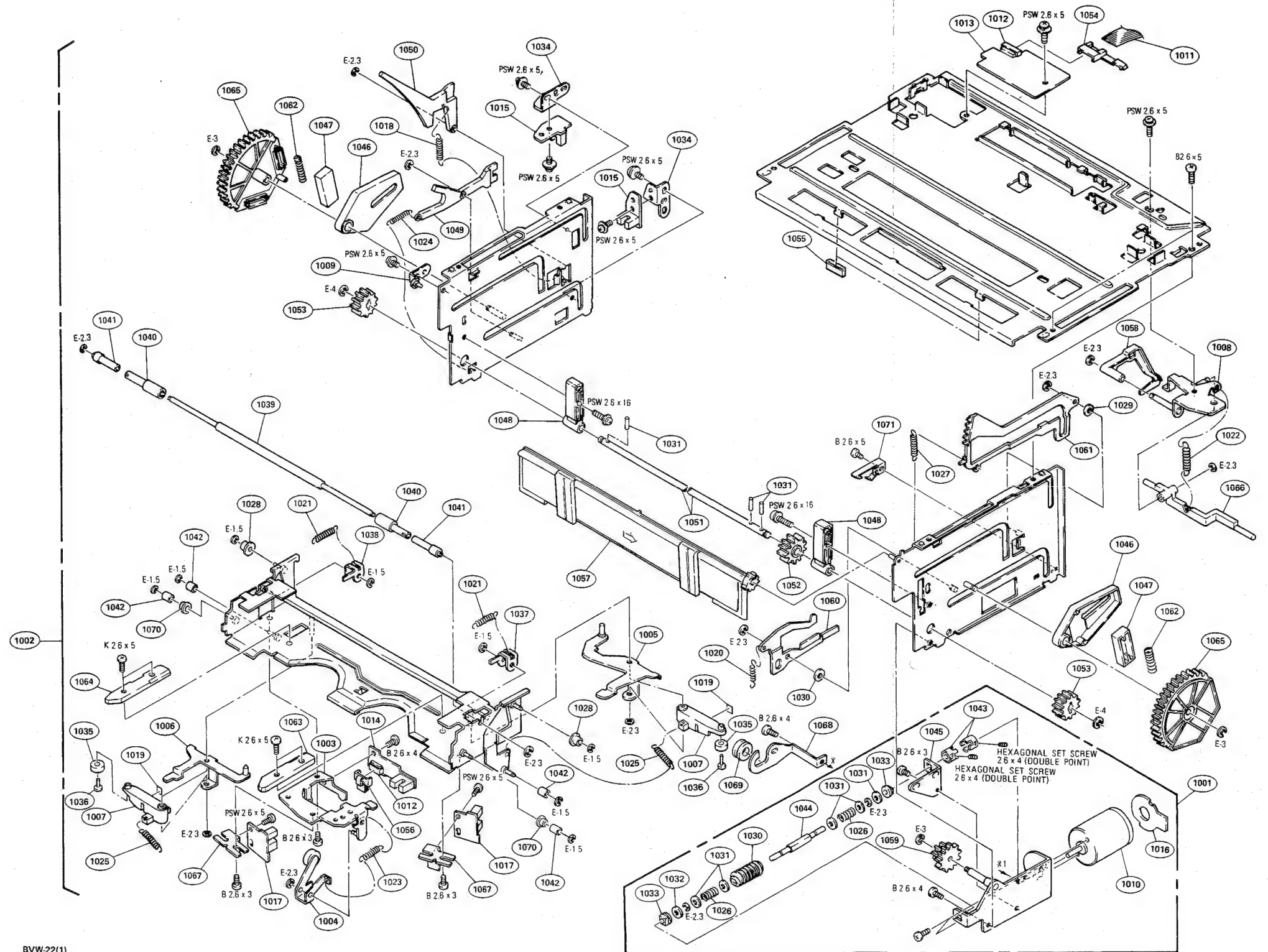
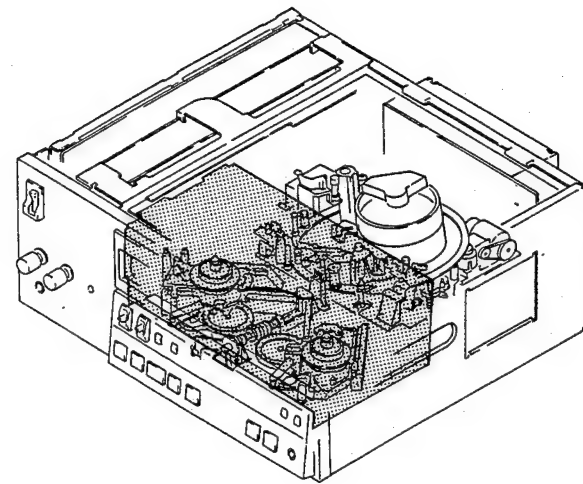
Exploded view diagram of the front door assembly for a refrigerator. The diagram shows the door (901) with various internal components and hardware. Key components and callouts include:

- 901: Front door assembly
- 902: Screws
- 903: Bolts
- 904: Door panel
- 905: Screws
- 906: Screws
- 907: Long screw
- 908: Bolt
- 909: Bolt
- 910: Door panel
- 911: Door panel

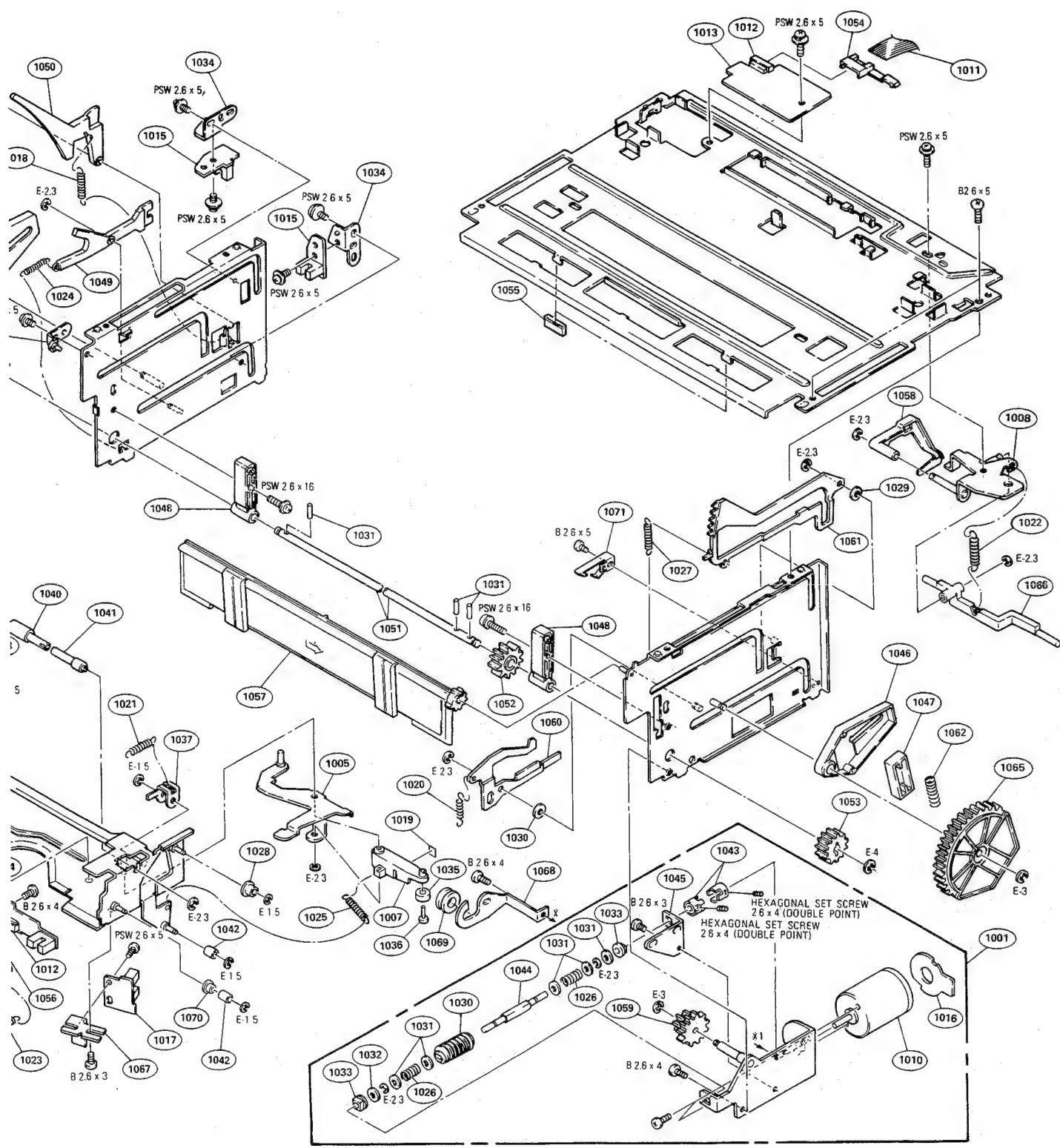
A key is shown at the bottom left with the text "BVW-22(1) BVW-22P(1)" and "PWH3 x 6".

BVW-22(1)
BVW-22P(1)

Cassette-up Compartment

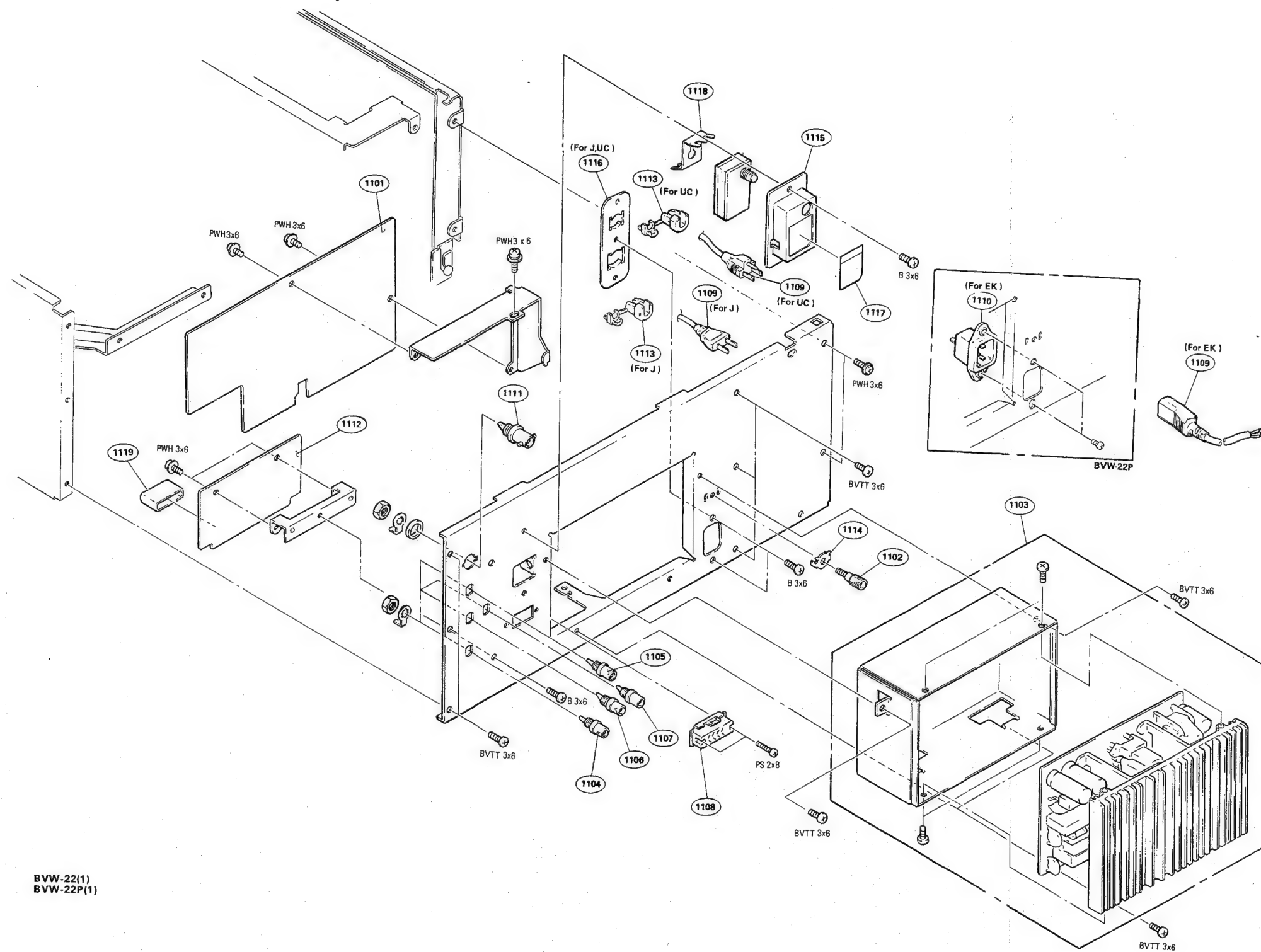
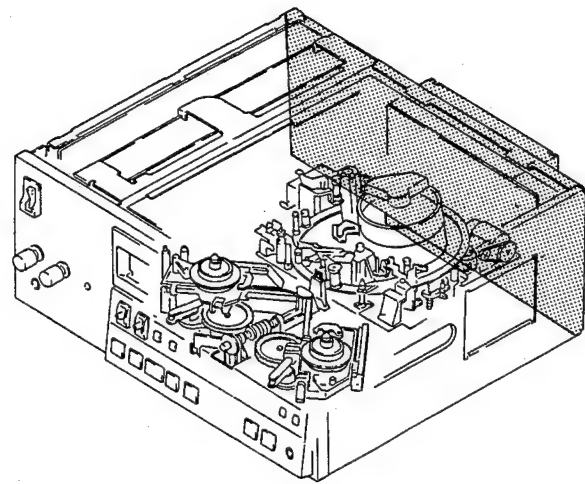


BVW-22(1)
BVW-22P(1)

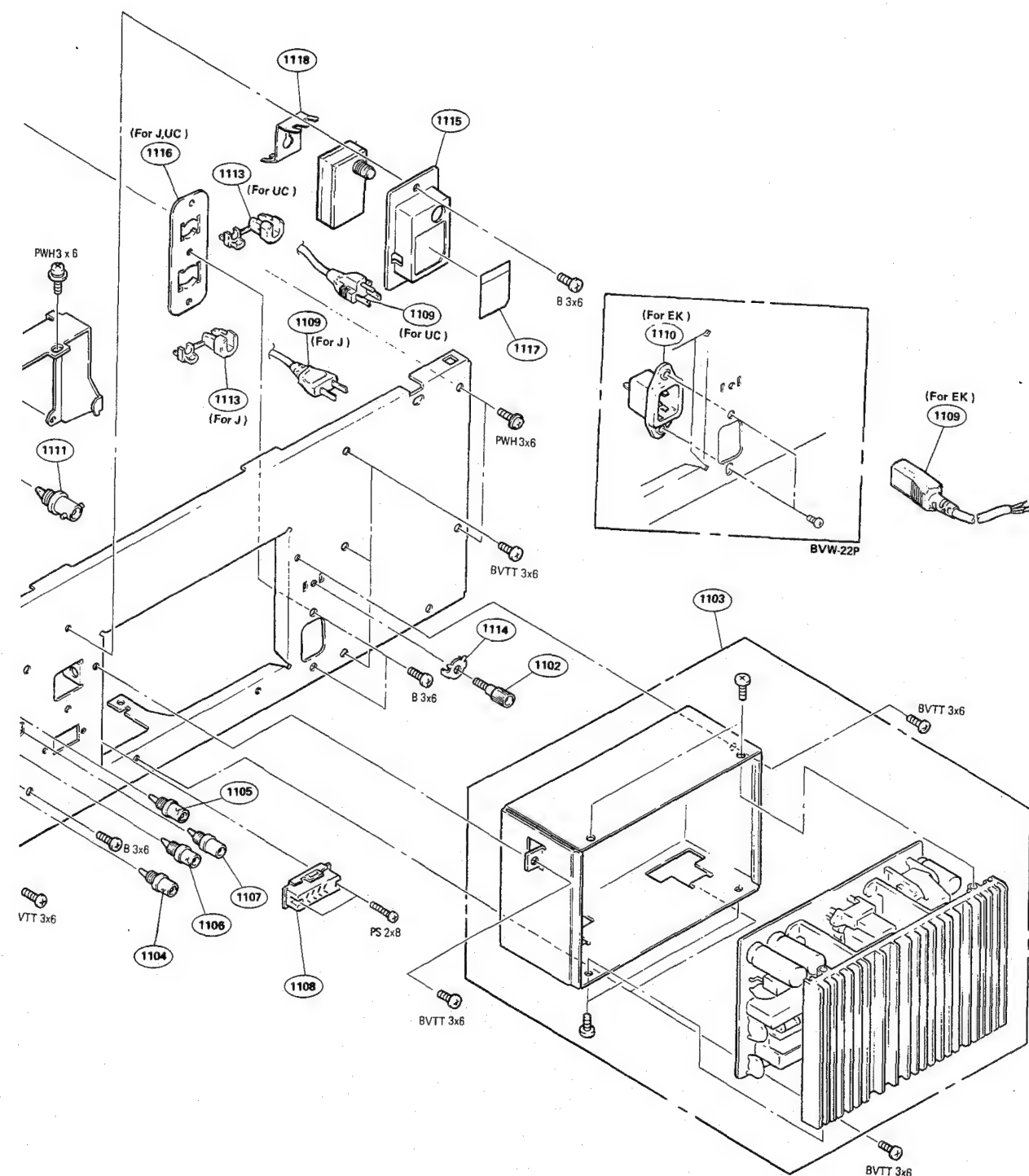


No.	Parts No.	SP	Description
1001	A-6737-178-A	s	MOTOR BLOCK ASS'Y
1002	A-6751-383-B	s	CASSETTE COMPARTMENT ASS'Y
1003	X-3717-380-1	o	DECK ASS'Y, ARM
1004	X-3717-231-1	o	ARM ASS'Y, LS
1005	X-3717-359-1	o	ARM (RIGHT) ASS'Y, CASSETTE IN
1006	X-3717-362-1	o	ARM (LEFT) ASS'Y, CASSETTE IN
1007	X-3717-361-1	o	ARM ASS'Y, PUSH OUT
1008	X-3717-235-1	o	CHASSIS ASS'Y, LID OPEN LEVER
1009	X-3717-236-1	o	BRACKET ASS'Y, DOOR
1010	1-541-376-11	o	MOTOR, DC (DNR-4700A)
1011	1-559-285-11	o	WIRE, FLEXIBLE CARD
1012	1-563-969-11	o	CONNECTOR, F.P.C, 7P
1013	1-622-602-11	o	PRINTED CIRCUIT BOARD, CL-14
1014	1-628-786-11	o	PRINTED CIRCUIT BOARD, PC-47
1015	1-622-604-11	o	PRINTED CIRCUIT BOARD, PC-33
1016	1-623-198-11	o	PRINTED CIRCUIT BOARD, CCM-2
1017	1-623-267-11	o	PRINTED CIRCUIT BOARD, PC-41
1018	3-140-263-XX	s	SPRING, TENSION (23T)
1019	3-329-460-01	o	SPACER
1020	3-437-284-00	s	SPRING, TENSION
1021	3-489-325-XX	s	SPRING, TENSION (16T)
1022	3-491-360-00	s	SPRING, TENSION
1023	3-509-127-00	s	SPRING, TENSION
1024	3-531-863-01	s	SPRING, TENSION
1025	3-578-389-00	s	SPRING, TENSION
1026	3-659-324-00	s	SPRING, COMPRESSION
1027	3-668-508-00	s	SPRING, TENSION
1028	3-677-187-00	s	ROLLER, GUIDE
1029	3-701-439-21	s	WASHER POLY 3MM DIA. 0.5T
1030	3-717-210-01	s	WORM
1031	3-717-212-01	o	WASHER (B), WORM
1032	3-717-213-01	o	WASHER (A), WORM
1033	3-717-214-01	o	BEARING, WORM
1034	3-717-339-01	o	BRACKET, PHOTO
1035	3-717-344-01	o	ROLLER, PUSH OUT
1036	3-717-345-01	o	SHAFT, PUSH OUT ROLLER
1037	3-717-346-01	o	ARM (RIGHT), CASSETTE PRESS
1038	3-717-347-01	o	ARM (LEFT), CASSETTE PRESS
1039	3-717-348-03	o	SHAFT, PRESS ROLLER
1040	3-717-349-01	o	ROLLER (S), PRESS
1041	3-717-350-01	o	ROLLER (L), PRESS
1042	3-717-351-01	o	ROLLER (B), GUIDE
1043	3-717-352-01	o	JOINT, MOTOR
1044	3-717-353-01	o	SHAFT, WORM
1045	3-717-354-01	o	BRACKET, WORM

No.	Parts No.	SP	Description
1046	3-717-355-01	o	ARM, DRIVING
1047	3-717-356-01	o	SLIDER, ARM DRIVING
1048	3-717-359-01	o	BEARING, DRIVING GEAR
1049	3-717-361-01	o	ARM (1), DOWN SW
1050	3-717-362-02	o	ARM (2), DOWN SW
1051	3-717-363-01	o	SHAFT, JOINT
1052	3-717-364-01	s	GEAR, JOINT
1053	3-717-365-01	s	GEAR, JOINT DRIVING
1054	3-717-368-01	o	HOLDER (B), F.P.C
1055	3-717-369-03	o	STOPPER, DOOR
1056	3-717-421-02	o	HOLDER (A), F.P.C
1057	3-717-435-04	o	DOOR, CASSETTE
1058	3-717-453-01	s	LEVER, LID OPEN
1059	3-717-454-01	o	WHEEL, WORM
1060	3-717-455-04	o	ARM, DOOR SWITCHING ASSIST
1061	3-717-457-01	o	ARM, DOOR SWITCHING
1062	3-717-458-01	s	SPRING, COMPRESSION
1063	3-717-460-03	o	GUIDE (RIGHT), CASSETTE
1064	3-717-461-03	o	GUIDE (LEFT), CASSETTE
1065	3-717-475-01	s	GEAR, DRIVING
1066	3-717-584-01	s	LEVER (B), LID OPEN
1067	3-717-585-01	o	BRACKET (B), PHOTO
1068	3-717-597-01	o	JOINT, PLATE
1069	3-717-598-01	o	JOINT, BEARING
1070	3-717-599-01	s	ROLLER (C), GUIDE
1071	3-727-017-02	o	PLATE, GROUND



REAR PANEL REAR PANEL



No. Parts No. SP Description

- 1101 A-6723-367-A o MOUNTED CIRCUIT BOARD, DC-36
- 1102 X-2068-004-0 s TERMINAL ASSY

- 1103 1-413-248-11 s SWITCHING REGULATOR, UR-14 (for J, UC)
- 1-413-249-12 s SWITCHING REGULATOR, UR-14E (for EK)

- 1104 1-507-858-21 o JACK, PIN 1P

- 1105 1-507-858-31 o JACK, PIN 1P

- 1106 1-507-858-41 o JACK, PIN 1P

- 1107 1-507-858-51 o JACK, PIN 1P

- 1108 1-509-095-00 s SOCKET, MULTI (8P)

- 1109 1-534-517-00 s CORD, AC (for UC)
- 1-551-188-XX s CORD, POWER (for J)
- 1-556-760-11 s CORD, POWER (for EK)
- 1110 1-560-222-11 s 3P INLET (for EK)

- 1111 1-561-781-11 s CONNECTOR, BNC (RECEPTACLE)

- 1112 1-626-309-11 o PRINTED CIRCUIT BOARD, AC-93 (for J, UC)
- 1-626-309-21 o PRINTED CIRCUIT BOARD, AC-93A (for EK)

- 1113 2-045-063-00 s STOPPER, CORD (for UC)
- 4-500-165-00 s STOPPER, CODE (for J)

- 1114 2-068-008-00 s WASHER

- 1115 3-725-021-01 o COVER, RF

- 1116 3-725-022-01 o PLATE, AC (for J, UC)

- 1117 3-725-024-11 o SHEET, CH (for UC)

- 3-725-024-01 o SHEET, CH (for J)

- 3-725-024-21 o SHEET, CH (for EK)

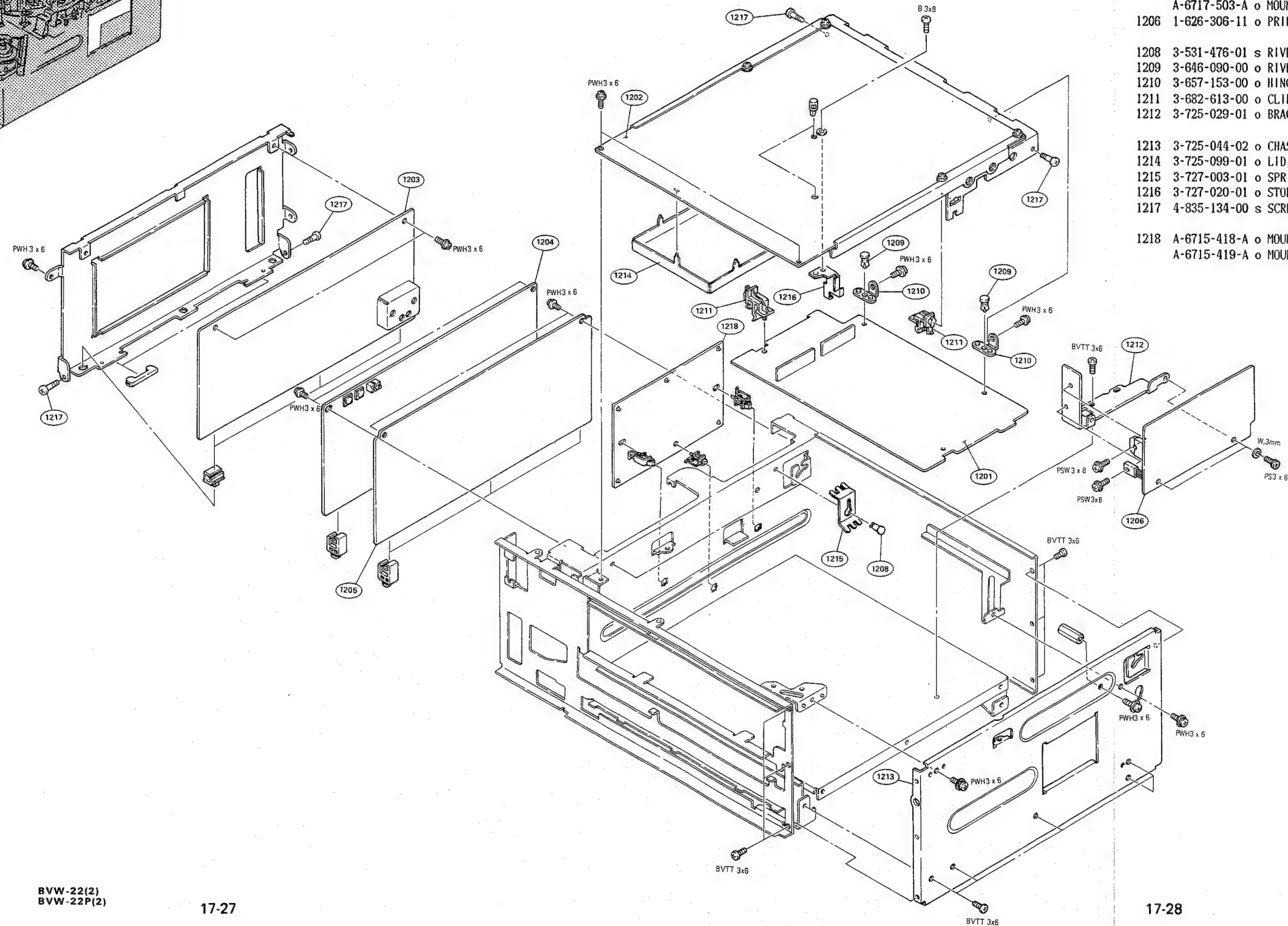
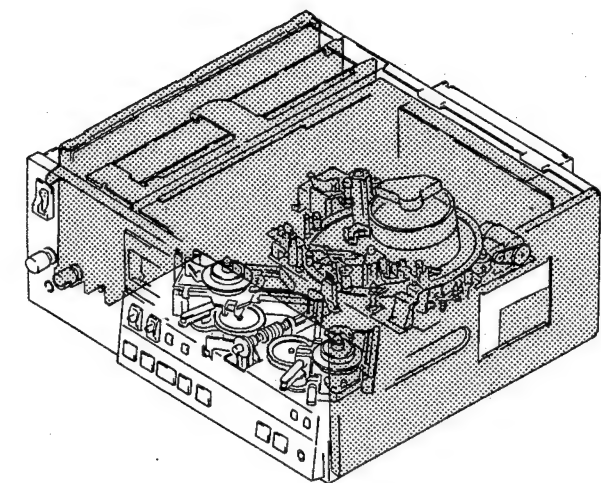
- 1118 3-727-003-01 o SPRING

- 1119 4-601-472-00 o COVER, FUSE

PRINTED CIRCUIT BOARD(1)

PRINTED CIRCUIT BOARD(1)

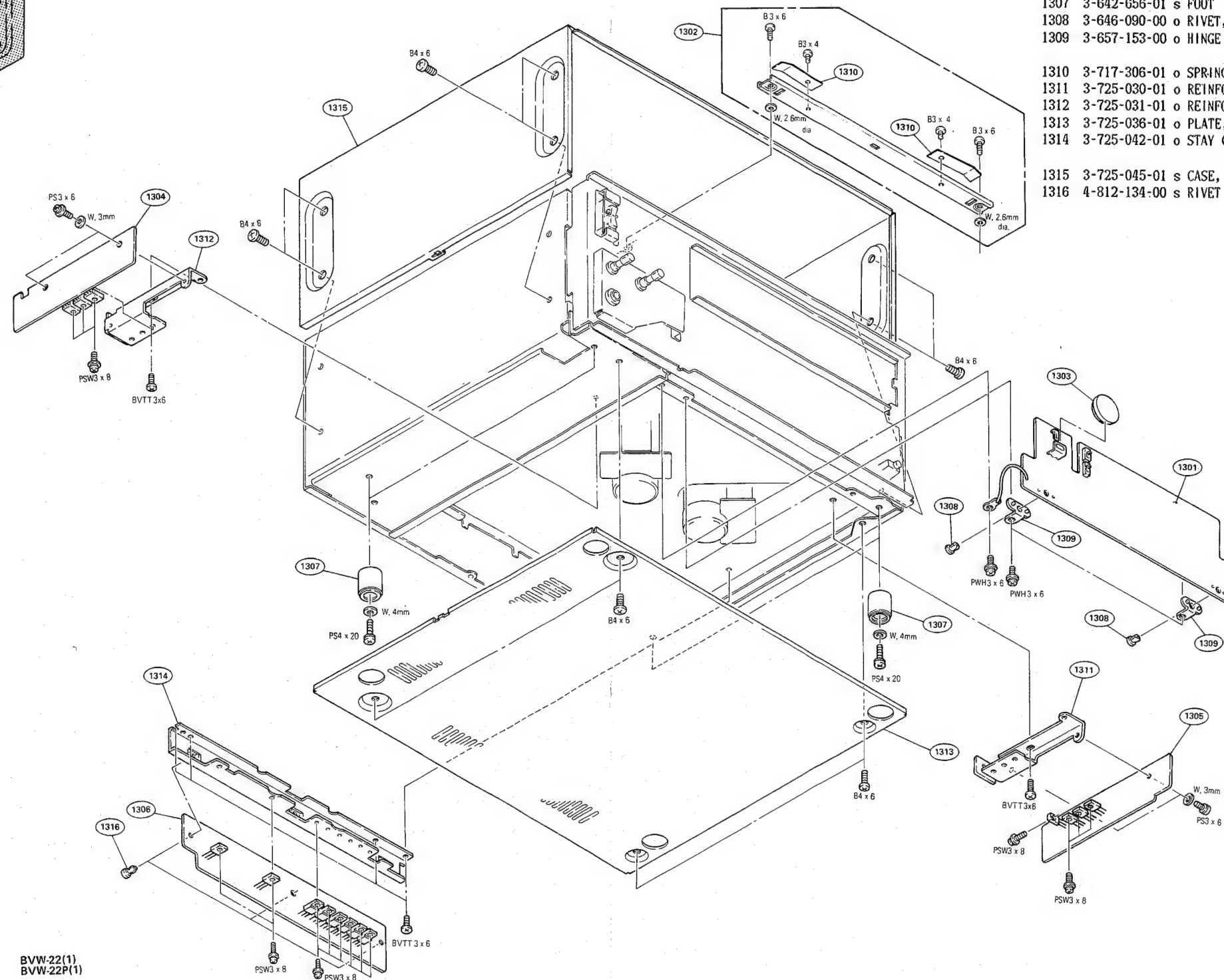
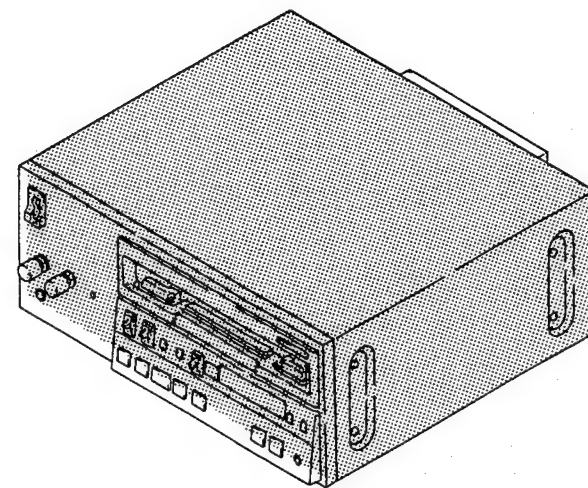
Printed Circuit Block



No.	Parts No.	SP Description
1201	A-6711-949-A	o MOUNTED CIRCUIT BOARD, DM-61 (for J, UC)
	A-6711-980-A	o MOUNTED CIRCUIT BOARD, DM-74 (for EK)
1202	A-6711-950-A	o MOUNTED CIRCUIT BOARD, EN-66 (for J, UC)
	A-6711-981-A	o MOUNTED CIRCUIT BOARD, EN-66A (for EK)
1203	A-6713-333-A	o MOUNTED CIRCUIT BOARD, AU-101 (for J, UC)
	A-6713-344-A	o MOUNTED CIRCUIT BOARD, AU-101A (for EK)
1204	A-6715-405-A	o MOUNTED CIRCUIT BOARD, SV-99
1205	A-6717-492-A	o MOUNTED CIRCUIT BOARD, SY-121 (for J, UC)
	A-6717-503-A	o MOUNTED CIRCUIT BOARD, SY-121A (for EK)
1206	1-626-306-11	o PRINTED CIRCUIT BOARD, CP-123
1208	3-531-476-01	s RIVET
1209	3-646-090-00	o RIVET, NYLON
1210	3-657-153-00	o HINGE
1211	3-682-613-00	o CLIP, (C), ANCHOR
1212	3-725-029-01	o BRACKET, CP
1213	3-725-044-02	o CHASSIS, R
1214	3-725-099-01	o LID, EN CASE (1)
1215	3-727-003-01	o SPRING
1216	3-727-020-01	o STOPPER, DM
1217	4-835-134-00	s SCREW, TD 3.8x2.5
1218	A-6715-418-A	o MOUNTED CIRCUIT BOARD, SV-117 (for J, UC)
	A-6715-419-A	o MOUNTED CIRCUIT BOARD, SV-117A (for EK)

BVW-22(2)
BVW-22P(2)

Printed Circuit and Ornamental Panel



BVW-22(1)
BVW-22P(1)

No. Parts No. SP Description

- 1301 A-6717-493-A o MOUNTED CIRCUIT BOARD, TC-49 (for J, UC)
A-6717-504-A o MOUNTED CIRCUIT BOARD, TC-49A (for EK)
- 1302 A-6730-932-A s STAY ASSY, CASSETTE COMPARTMENT
- 1303 1-528-229-11 o BATTERY, LITHIUM (CR-2450)
- 1304 1-626-312-11 o PRINTED CIRCUIT BOARD, DUS-174
- 1305 1-626-313-11 o PRINTED CIRCUIT BOARD, DUS-175
- 1306 1-626-314-11 o PRINTED CIRCUIT BOARD, SVD-2
- 1307 3-642-656-01 s FOOT
- 1308 3-646-090-00 o RIVET, NYLON
- 1309 3-657-153-00 o HINGE
- 1310 3-717-306-01 o SPRING
- 1311 3-725-030-01 o REINFORCEMENT (T), R-DRIVER
- 1312 3-725-031-01 o REINFORCEMENT (S), R-DRIVER
- 1313 3-725-036-01 o PLATE, BOTTOM
- 1314 3-725-042-01 o STAY (B), REINFORCEMENT
- 1315 3-725-045-01 s CASE, U
- 1316 4-812-134-00 s RIVET NYLON, 3.5

17-3. ELECTRICAL PARTS LIST

CAPACITOR, ELECTROLYTIC

(CAPACITOR, ELECTROLYTIC)

Part No.	SP	Description			
1-124-902-00	s	CAP, ELECT	0.47	20%	50V
1-124-791-11	s	CAP, ELECT	1.0	20%	100V
1-124-925-11	s	CAP, ELECT	2.2	20%	100V
1-123-382-00	s	CAP, ELECT	3.3	20%	100V
1-124-927-00	s	CAP, ELECT	4.7	20%	100V
1-123-875-91	s	CAP, ELECT	10	20%	50V
1-124-915-11	s	CAP, ELECT	10	20%	63V
1-124-667-11	s	CAP, ELECT	10	20%	100V
1-124-908-11	s	CAP, ELECT	22	20%	50V
1-124-916-11	s	CAP, ELECT	22	20%	63V
1-124-929-11	s	CAP, ELECT	22	20%	100V
1-124-963-11	s	CAP, ELECT	33	20%	16V
1-124-482-11	s	CAP, ELECT	33	20%	35V
1-124-917-11	s	CAP, ELECT	33	20%	63V
1-124-930-11	s	CAP, ELECT	33	20%	100V
1-124-446-11	s	CAP, ELECT	47	20%	10V
1-124-477-11	s	CAP, ELECT	47	20%	25V
1-124-910-11	s	CAP, ELECT	47	20%	50V
1-124-918-11	s	CAP, ELECT	47	20%	63V
1-124-931-11	s	CAP, ELECT	47	20%	100V
1-124-443-00	s	CAP, ELECT	100	20%	10V
1-126-101-11	s	CAP, ELECT	100	20%	16V
1-124-478-11	s	CAP, ELECT	100	20%	25V
1-124-122-11	s	CAP, ELECT	100	20%	50V
1-124-572-11	s	CAP, ELECT	100	20%	63V
1-123-605-00	s	CAP, ELECT	100	20%	100V
1-124-444-00	s	CAP, ELECT	220	20%	10V
1-124-120-11	s	CAP, ELECT	220	20%	25V
1-124-484-11	s	CAP, ELECT	220	20%	35V
1-124-911-11	s	CAP, ELECT	220	20%	50V
1-124-919-51	s	CAP, ELECT	220	20%	63V
1-124-628-11	s	CAP, ELECT	220	20%	100V
1-124-442-00	s	CAP, ELECT	330	20%	6.3V
1-124-604-00	s	CAP, ELECT	330	20%	10V
1-124-119-00	s	CAP, ELECT	330	20%	16V
1-124-479-11	s	CAP, ELECT	330	20%	25V
1-124-485-11	s	CAP, ELECT	330	20%	35V
1-124-912-11	s	CAP, ELECT	330	20%	50V
1-124-472-11	s	CAP, ELECT	470	20%	10V
1-124-475-11	s	CAP, ELECT	470	20%	16V
1-124-480-11	s	CAP, ELECT	470	20%	25V
1-126-104-11	s	CAP, ELECT	470	20%	35V
1-124-913-11	s	CAP, ELECT	470	20%	50V
1-124-921-11	s	CAP, ELECT	470	20%	63V
1-124-471-00	s	CAP, ELECT	1000	20%	6.3V
1-124-473-11	s	CAP, ELECT	1000	20%	10V
1-124-555-00	s	CAP, ELECT	1000	20%	16V
1-124-557-11	s	CAP, ELECT	1000	20%	25V
1-126-105-11	s	CAP, ELECT	1000	20%	35V
1-124-637-11	s	CAP, ELECT	1000	20%	50V
1-124-922-11	s	CAP, ELECT	1000	20%	63V
1-124-893-11	s	CAP, ELECT	2200	20%	10V
1-124-556-11	s	CAP, ELECT	2200	20%	16V
1-124-563-11	s	CAP, ELECT	2200	20%	25V
1-124-618-11	s	CAP, ELECT	2200	20%	35V

Part No.	SP	Description			
1-124-607-11	s	CAP, ELECT	2200	20%	50V
1-124-621-11	s	CAP, ELECT	3300	20%	6.3V
1-124-887-00	s	CAP, ELECT	3300	20%	16V
1-124-636-00	s	CAP, ELECT	3300	20%	25V
1-124-762-00	s	CAP, ELECT	4700	20%	10V
1-124-898-11	s	CAP, ELECT	4700	20%	16V
1-124-564-11	s	CAP, ELECT	4700	20%	25V
1-124-891-11	s	CAP, ELECT	10000	20%	6.3V
1-124-763-00	s	CAP, ELECT	10000	20%	10V

CAPACITOR, MYLAR

Part No.	SP	Description
1-130-467-00	s	CAP, MYLAR 470pF 5% 50V
1-130-468-00	s	CAP, MYLAR 560pF 5% 50V
1-130-469-00	s	CAP, MYLAR 680pF 5% 50V
1-130-470-00	s	CAP, MYLAR 820pF 5% 50V
1-130-471-00	s	CAP, MYLAR 1000pF 5% 50V
1-130-472-00	s	CAP, MYLAR 1200pF 5% 50V
1-130-473-00	s	CAP, MYLAR 1500pF 5% 50V
1-130-474-00	s	CAP, MYLAR 1800pF 5% 50V
1-130-475-00	s	CAP, MYLAR 2200pF 5% 50V
1-130-476-00	s	CAP, MYLAR 2700pF 5% 50V
1-130-477-00	s	CAP, MYLAR 3300pF 5% 50V
1-130-478-00	s	CAP, MYLAR 3900pF 5% 50V
1-130-479-00	s	CAP, MYLAR 4700pF 5% 50V
1-130-480-00	s	CAP, MYLAR 5600pF 5% 50V
1-130-481-00	s	CAP, MYLAR 6800pF 5% 50V
1-130-482-00	s	CAP, MYLAR 8200pF 5% 50V
1-130-483-00	s	CAP, MYLAR 0.01 5% 50V
1-130-484-00	s	CAP, MYLAR 0.012 5% 50V
1-130-485-00	s	CAP, MYLAR 0.015 5% 50V
1-130-486-00	s	CAP, MYLAR 0.018 5% 50V
1-130-487-00	s	CAP, MYLAR 0.022 5% 50V
1-130-488-00	s	CAP, MYLAR 0.027 5% 50V
1-130-489-00	s	CAP, MYLAR 0.033 5% 50V
1-130-490-11	s	CAP, MYLAR 0.039 5% 50V
1-130-491-00	s	CAP, MYLAR 0.047 5% 50V
1-130-492-11	s	CAP, MYLAR 0.056 5% 50V
1-130-493-00	s	CAP, MYLAR 0.068 5% 50V
1-130-494-11	s	CAP, MYLAR 0.082 5% 50V
1-130-495-00	s	CAP, MYLAR 0.1 5% 50V
1-130-496-00	s	CAP, MYLAR 0.12 5% 50V
1-130-497-00	s	CAP, MYLAR 0.15 5% 50V
1-130-498-00	s	CAP, MYLAR 0.18 5% 50V
1-130-499-00	s	CAP, MYLAR 0.22 5% 50V
1-136-502-11	s	CAP, MYLAR 0.33 5% 50V

CAPACITOR, CHIP CERAMIC

Part No.	SP	Description
1-163-083-00	s	CAP, CHIP CERAMIC 1pF +-0.25pF 50V
1-163-085-00	s	CAP, CHIP CERAMIC 2pF +-0.25pF 50V
1-163-087-00	s	CAP, CHIP CERAMIC 4pF +-0.25pF 50V
1-163-089-00	s	CAP, CHIP CERAMIC 6pF +-0.5pF 50V
1-163-091-00	s	CAP, CHIP CERAMIC 8pF +-0.5pF 50V
1-163-093-00	s	CAP, CHIP CERAMIC 10pF 5% 50V
1-163-097-00	s	CAP, CHIP CERAMIC 15pF 5% 50V
1-163-101-00	s	CAP, CHIP CERAMIC 22pF 5% 50V
1-163-105-00	s	CAP, CHIP CERAMIC 33pF 5% 50V
1-163-109-00	s	CAP, CHIP CERAMIC 47pF 5% 50V
1-163-113-00	s	CAP, CHIP CERAMIC 68pF 5% 50V
1-163-117-00	s	CAP, CHIP CERAMIC 100pF 5% 50V
1-163-121-00	s	CAP, CHIP CERAMIC 150pF 5% 50V
1-163-125-00	s	CAP, CHIP CERAMIC 220pF 5% 50V
1-163-129-00	s	CAP, CHIP CERAMIC 330pF 5% 50V
1-163-133-00	s	CAP, CHIP CERAMIC 470pF 5% 50V
1-163-137-00	s	CAP, CHIP CERAMIC 680pF 5% 50V
1-163-141-00	s	CAP, CHIP CERAMIC 1000pF 5% 50V
1-163-145-00	s	CAP, CHIP CERAMIC 1500pF 10% 50V
1-163-013-00	s	CAP, CHIP CERAMIC 2200pF 10% 50V
1-163-015-00	s	CAP, CHIP CERAMIC 3300pF 10% 50V
1-163-017-00	s	CAP, CHIP CERAMIC 4700pF 10% 50V
1-163-019-00	s	CAP, CHIP CERAMIC 6800pF 10% 50V
1-163-021-00	s	CAP, CHIP CERAMIC 0.01 10% 50V
1-163-023-00	s	CAP, CHIP CERAMIC 0.015 10% 50V
1-163-034-00	s	CAP, CHIP CERAMIC 0.033 50V
1-163-035-00	s	CAP, CHIP CERAMIC 0.047 50V
1-163-036-00	s	CAP, CHIP CERAMIC 0.068 50V
1-163-038-00	s	CAP, CHIP CERAMIC 0.1 50V

RESISTOR, METAL

Part No.	SP	Description
1-215-373-31	s	RES, METAL 10 1% 1/6W
1-215-374-00	s	RES, METAL 11 1% 1/6W
1-215-375-00	s	RES, METAL 12 1% 1/6W
1-215-376-00	s	RES, METAL 13 1% 1/6W
1-215-377-00	s	RES, METAL 15 1% 1/6W
1-215-378-00	s	RES, METAL 16 1% 1/6W
1-215-379-00	s	RES, METAL 18 1% 1/6W
1-215-380-00	s	RES, METAL 20 1% 1/6W
1-215-381-00	s	RES, METAL 22 1% 1/6W
1-215-382-00	s	RES, METAL 24 1% 1/6W
1-215-383-00	s	RES, METAL 27 1% 1/6W
1-215-384-00	s	RES, METAL 30 1% 1/6W
1-215-385-00	s	RES, METAL 33 1% 1/6W
1-215-386-00	s	RES, METAL 36 1% 1/6W
1-215-387-00	s	RES, METAL 39 1% 1/6W
1-215-388-00	s	RES, METAL 43 1% 1/6W
1-215-389-00	s	RES, METAL 47 1% 1/6W
1-215-390-00	s	RES, METAL 51 1% 1/6W
1-215-391-00	s	RES, METAL 56 1% 1/6W
1-215-392-00	s	RES, METAL 62 1% 1/6W
1-215-393-00	s	RES, METAL 68 1% 1/6W
1-215-394-00	s	RES, METAL 75 1% 1/6W
1-215-395-00	s	RES, METAL 82 1% 1/6W
1-215-396-00	s	RES, METAL 91 1% 1/6W
1-215-397-00	s	RES, METAL 100 1% 1/6W
1-215-398-00	s	RES, METAL 110 1% 1/6W
1-215-399-00	s	RES, METAL 120 1% 1/6W
1-215-400-00	s	RES, METAL 130 1% 1/6W
1-215-401-00	s	RES, METAL 150 1% 1/6W
1-215-402-00	s	RES, METAL 160 1% 1/6W
1-215-403-00	s	RES, METAL 180 1% 1/6W
1-215-404-00	s	RES, METAL 200 1% 1/6W
1-215-405-00	s	RES, METAL 220 1% 1/6W
1-215-406-00	s	RES, METAL 240 1% 1/6W
1-215-407-00	s	RES, METAL 270 1% 1/6W
1-215-408-00	s	RES, METAL 300 1% 1/6W
1-215-409-00	s	RES, METAL 330 1% 1/6W
1-215-410-00	s	RES, METAL 360 1% 1/6W
1-215-411-00	s	RES, METAL 390 1% 1/6W
1-215-412-00	s	RES, METAL 430 1% 1/6W
1-215-413-00	s	RES, METAL 470 1% 1/6W
1-215-414-00	s	RES, METAL 510 1% 1/6W
1-215-415-00	s	RES, METAL 560 1% 1/6W
1-215-416-00	s	RES, METAL 620 1% 1/6W
1-215-417-00	s	RES, METAL 680 1% 1/6W
1-215-418-00	s	RES, METAL 750 1% 1/6W
1-215-419-00	s	RES, METAL 820 1% 1/6W
1-215-420-00	s	RES, METAL 910 1% 1/6W
1-215-421-00	s	RES, METAL 1.0k 1% 1/6W
1-215-422-00	s	RES, METAL 1.1k 1% 1/6W
1-215-423-00	s	RES, METAL 1.2k 1% 1/6W
1-215-424-00	s	RES, METAL 1.3k 1% 1/6W
1-215-425-00	s	RES, METAL 1.5k 1% 1/6W
1-215-426-00	s	RES, METAL 1.6k 1% 1/6W
1-215-427-00	s	RES, METAL 1.8k 1% 1/6W

(RESISTOR, METAL)

Part No.	SP	Description
1-215-428-00	s	RES, METAL 2.0k 1% 1/6W
1-215-429-00	s	RES, METAL 2.2k 1% 1/6W
1-215-430-00	s	RES, METAL 2.4k 1% 1/6W
1-215-431-00	s	RES, METAL 2.7k 1% 1/6W
1-215-432-00	s	RES, METAL 3.0k 1% 1/6W
1-215-433-00	s	RES, METAL 3.3k 1% 1/6W
1-215-434-00	s	RES, METAL 3.6k 1% 1/6W
1-215-435-00	s	RES, METAL 3.9k 1% 1/6W
1-215-436-00	s	RES, METAL 4.3k 1% 1/6W
1-215-437-00	s	RES, METAL 4.7k 1% 1/6W
1-215-438-00	s	RES, METAL 5.1k 1% 1/6W
1-215-439-00	s	RES, METAL 5.6k 1% 1/6W
1-215-440-00	s	RES, METAL 6.2k 1% 1/6W
1-215-441-00	s	RES, METAL 6.8k 1% 1/6W
1-215-442-00	s	RES, METAL 7.5k 1% 1/6W
1-215-443-00	s	RES, METAL 8.2k 1% 1/6W
1-215-444-00	s	RES, METAL 9.1k 1% 1/6W
1-215-445-00	s	RES, METAL 10k 1% 1/6W
1-215-446-00	s	RES, METAL 11k 1% 1/6W
1-215-447-00	s	RES, METAL 12k 1% 1/6W
1-215-448-00	s	RES, METAL 13k 1% 1/6W
1-215-449-00	s	RES, METAL 15k 1% 1/6W
1-215-450-00	s	RES, METAL 16k 1% 1/6W
1-215-451-00	s	RES, METAL 18k 1% 1/6W
1-215-452-00	s	RES, METAL 20k 1% 1/6W
1-215-453-00	s	RES, METAL 22k 1% 1/6W
1-215-454-00	s	RES, METAL 24k 1% 1/6W
1-215-455-00	s	RES, METAL 27k 1% 1/6W
1-215-456-00	s	RES, METAL 30k 1% 1/6W
1-215-457-00	s	RES, METAL 33k 1% 1/6W
1-215-458-00	s	RES, METAL 36k 1% 1/6W
1-215-459-00	s	RES, METAL 39k 1% 1/6W
1-215-460-00	s	RES, METAL 43k 1% 1/6W
1-215-461-00	s	RES, METAL 47k 1% 1/6W
1-215-462-00	s	RES, METAL 51k 1% 1/6W
1-215-463-00	s	RES, METAL 56k 1% 1/6W
1-215-464-00	s	RES, METAL 62k 1% 1/6W
1-215-465-00	s	RES, METAL 68k 1% 1/6W
1-215-466-00	s	RES, METAL 75k 1% 1/6W
1-215-467-00	s	RES, METAL 82k 1% 1/6W
1-215-468-00	s	RES, METAL 91k 1% 1/6W
1-215-469-00	s	RES, METAL 100k 1% 1/6W
1-215-470-00	s	RES, METAL 110k 1% 1/6W
1-215-471-00	s	RES, METAL 120k 1% 1/6W
1-215-472-00	s	RES, METAL 130k 1% 1/6W
1-215-473-00	s	RES, METAL 150k 1% 1/6W
1-215-474-00	s	RES, METAL 160k 1% 1/6W
1-215-475-00	s	RES, METAL 180k 1% 1/6W
1-215-476-00	s	RES, METAL 200k 1% 1/6W
1-215-477-00	s	RES, METAL 220k 1% 1/6W
1-215-478-00	s	RES, METAL 240k 1% 1/6W
1-215-479-00	s	RES, METAL 270k 1% 1/6W
1-215-480-00	s	RES, METAL 300k 1% 1/6W
1-215-481-00	s	RES, METAL 330k 1% 1/6W
1-215-482-00	s	RES, METAL 360k 1% 1/6W

(RESISTOR, METAL)

Part No.	SP	Description
1-215-483-00	s	RES, METAL 390k 1% 1/6W
1-215-484-00	s	RES, METAL 430k 1% 1/6W
1-215-485-00	s	RES, METAL 470k 1% 1/6W
1-215-486-00	s	RES, METAL 510k 1% 1/6W
1-215-487-00	s	RES, METAL 560k 1% 1/6W
1-215-488-00	s	RES, METAL 620k 1% 1/6W
1-215-489-00	s	RES, METAL 680k 1% 1/6W
1-215-490-00	s	RES, METAL 750k 1% 1/6W
1-215-491-00	s	RES, METAL 820k 1% 1/6W
1-215-492-00	s	RES, METAL 910k 1% 1/6W
1-215-493-00	s	RES, METAL 1.0M 1% 1/6W

RESISTOR, CHIP

Part No.	SP	Description
1-216-295-00	s	RES, CHIP 0 5% 1/10W
1-216-298-00	s	RES, CHIP 2.2 5% 1/10W
1-216-302-00	s	RES, CHIP 2.7 5% 1/10W
1-216-304-00	s	RES, CHIP 3.3 5% 1/10W
1-216-306-00	s	RES, CHIP 3.9 5% 1/10W
1-216-308-00	s	RES, CHIP 4.7 5% 1/10W
1-216-309-00	s	RES, CHIP 5.6 5% 1/10W
1-216-311-00	s	RES, CHIP 6.8 5% 1/10W
1-216-313-00	s	RES, CHIP 8.2 5% 1/10W
1-216-001-00	s	RES, CHIP 10 5% 1/10W
1-216-003-00	s	RES, CHIP 12 5% 1/10W
1-216-005-00	s	RES, CHIP 15 5% 1/10W
1-216-007-00	s	RES, CHIP 18 5% 1/10W
1-216-009-00	s	RES, CHIP 22 5% 1/10W
1-216-011-00	s	RES, CHIP 27 5% 1/10W
1-216-013-00	s	RES, CHIP 33 5% 1/10W
1-216-015-00	s	RES, CHIP 39 5% 1/10W
1-216-017-00	s	RES, CHIP 47 5% 1/10W
1-216-019-00	s	RES, CHIP 56 5% 1/10W
1-216-021-00	s	RES, CHIP 68 5% 1/10W
1-216-023-00	s	RES, CHIP 82 5% 1/10W
1-216-025-00	s	RES, CHIP 100 5% 1/10W
1-216-027-00	s	RES, CHIP 120 5% 1/10W
1-216-029-00	s	RES, CHIP 150 5% 1/10W
1-216-031-00	s	RES, CHIP 180 5% 1/10W
1-216-033-00	s	RES, CHIP 220 5% 1/10W
1-216-035-00	s	RES, CHIP 270 5% 1/10W
1-216-037-00	s	RES, CHIP 330 5% 1/10W
1-216-039-00	s	RES, CHIP 390 5% 1/10W
1-216-041-00	s	RES, CHIP 470 5% 1/10W
1-216-043-00	s	RES, CHIP 560 5% 1/10W
1-216-045-00	s	RES, CHIP 680 5% 1/10W
1-216-047-00	s	RES, CHIP 820 5% 1/10W
1-216-049-00	s	RES, CHIP 1k 5% 1/10W
1-216-051-00	s	RES, CHIP 1.2k 5% 1/10W
1-216-053-00	s	RES, CHIP 1.5k 5% 1/10W
1-216-055-00	s	RES, CHIP 1.8k 5% 1/10W
1-216-057-00	s	RES, CHIP 2.2k 5% 1/10W
1-216-059-00	s	RES, CHIP 2.7k 5% 1/10W
1-216-061-00	s	RES, CHIP 3.3k 5% 1/10W
1-216-063-00	s	RES, CHIP 3.9k 5% 1/10W
1-216-065-00	s	RES, CHIP 4.7k 5% 1/10W
1-216-067-00	s	RES, CHIP 5.6k 5% 1/10W
1-216-069-00	s	RES, CHIP 6.8k 5% 1/10W
1-216-071-00	s	RES, CHIP 8.2k 5% 1/10W
1-216-073-00	s	RES, CHIP 10k 5% 1/10W
1-216-075-00	s	RES, CHIP 12k 5% 1/10W
1-216-077-00	s	RES, CHIP 15k 5% 1/10W
1-216-079-00	s	RES, CHIP 18k 5% 1/10W
1-216-081-00	s	RES, CHIP 22k 5% 1/10W
1-216-083-00	s	RES, CHIP 27k 5% 1/10W
1-216-085-00	s	RES, CHIP 33k 5% 1/10W
1-216-087-00	s	RES, CHIP 39k 5% 1/10W
1-216-089-00	s	RES, CHIP 47k 5% 1/10W
1-216-091-00	s	RES, CHIP 56k 5% 1/10W

(RESISTOR, CHIP)

Part No.	SP	Description
1-216-093-00	s	RES, CHIP 68k 5% 1/10W
1-216-095-00	s	RES, CHIP 82k 5% 1/10W
1-216-097-00	s	RES, CHIP 100k 5% 1/10W
1-216-099-00	s	RES, CHIP 120k 5% 1/10W
1-216-101-00	s	RES, CHIP 150k 5% 1/10W
1-216-103-00	s	RES, CHIP 180k 5% 1/10W
1-216-105-00	s	RES, CHIP 220k 5% 1/10W
1-216-107-00	s	RES, CHIP 270k 5% 1/10W
1-216-109-00	s	RES, CHIP 330k 5% 1/10W
1-216-111-00	s	RES, CHIP 390k 5% 1/10W
1-216-113-00	s	RES, CHIP 470k 5% 1/10W
1-216-115-00	s	RES, CHIP 560k 5% 1/10W
1-216-117-00	s	RES, CHIP 680k 5% 1/10W
1-216-119-00	s	RES, CHIP 820k 5% 1/10W
1-216-121-00	s	RES, CHIP 1.0M 5% 1/10W
1-216-123-00	s	RES, CHIP 1.2M 5% 1/10W
1-216-125-00	s	RES, CHIP 1.5M 5% 1/10W
1-216-127-00	s	RES, CHIP 1.8M 5% 1/10W
1-216-129-00	s	RES, CHIP 2.2M 5% 1/10W
1-216-131-00	s	RES, CHIP 2.7M 5% 1/10W
1-216-133-00	s	RES, CHIP 3.3M 5% 1/10W

RESISTOR, CHIP METAL

Part No.	SP	Description
1-216-603-11	s	RES, CHIP METAL 10 1% 1/10W
1-216-605-11	s	RES, CHIP METAL 12 1% 1/10W
1-216-609-11	s	RES, CHIP METAL 18 1% 1/10W
1-216-611-11	s	RES, CHIP METAL 22 1% 1/10W
1-216-614-11	s	RES, CHIP METAL 30 1% 1/10W
1-216-617-11	s	RES, CHIP METAL 39 1% 1/10W
1-216-619-11	s	RES, CHIP METAL 47 1% 1/10W
1-216-620-11	s	RES, CHIP METAL 51 1% 1/10W
1-216-623-11	s	RES, CHIP METAL 68 1% 1/10W
1-216-624-11	s	RES, CHIP METAL 75 1% 1/10W
1-216-625-11	s	RES, CHIP METAL 82 1% 1/10W
1-216-626-11	s	RES, CHIP METAL 91 1% 1/10W
1-216-627-11	s	RES, CHIP METAL 100 1% 1/10W
1-216-629-11	s	RES, CHIP METAL 120 1% 1/10W
1-216-631-11	s	RES, CHIP METAL 150 1% 1/10W
1-216-633-11	s	RES, CHIP METAL 180 1% 1/10W
1-216-634-11	s	RES, CHIP METAL 200 1% 1/10W
1-216-635-11	s	RES, CHIP METAL 220 1% 1/10W
1-216-636-11	s	RES, CHIP METAL 240 1% 1/10W
1-216-637-11	s	RES, CHIP METAL 270 1% 1/10W
1-216-638-11	s	RES, CHIP METAL 300 1% 1/10W
1-216-639-11	s	RES, CHIP METAL 330 1% 1/10W
1-216-640-11	s	RES, CHIP METAL 360 1% 1/10W
1-216-641-11	s	RES, CHIP METAL 390 1% 1/10W
1-216-642-11	s	RES, CHIP METAL 430 1% 1/10W
1-216-643-11	s	RES, CHIP METAL 470 1% 1/10W
1-216-644-11	s	RES, CHIP METAL 510 1% 1/10W
1-216-645-11	s	RES, CHIP METAL 560 1% 1/10W
1-216-647-11	s	RES, CHIP METAL 680 1% 1/10W
1-216-648-11	s	RES, CHIP METAL 750 1% 1/10W
1-216-649-11	s	RES, CHIP METAL 820 1% 1/10W
1-216-650-11	s	RES, CHIP METAL 910 1% 1/10W
1-216-651-11	s	RES, CHIP METAL 1.0k 1% 1/10W
1-216-652-11	s	RES, CHIP METAL 1.1k 1% 1/10W
1-216-653-11	s	RES, CHIP METAL 1.2k 1% 1/10W
1-216-655-11	s	RES, CHIP METAL 1.5k 1% 1/10W
1-216-656-11	s	RES, CHIP METAL 1.6k 1% 1/10W
1-216-657-11	s	RES, CHIP METAL 1.8k 1% 1/10W
1-216-658-11	s	RES, CHIP METAL 2k 1% 1/10W
1-216-659-11	s	RES, CHIP METAL 2.2k 1% 1/10W
1-216-660-11	s	RES, CHIP METAL 2.4k 1% 1/10W
1-216-661-11	s	RES, CHIP METAL 2.7k 1% 1/10W
1-216-662-11	s	RES, CHIP METAL 3k 1% 1/10W
1-216-663-11	s	RES, CHIP METAL 3.3k 1% 1/10W
1-216-664-11	s	RES, CHIP METAL 3.5k 1% 1/10W
1-216-665-11	s	RES, CHIP METAL 3.9k 1% 1/10W
1-216-666-11	s	RES, CHIP METAL 4.3k 1% 1/10W
1-216-667-11	s	RES, CHIP METAL 4.7k 1% 1/10W
1-216-668-11	s	RES, CHIP METAL 5.1k 1% 1/10W
1-216-669-11	s	RES, CHIP METAL 5.6k 1% 1/10W

(RESISTOR, CHIP METAL)

Part No.	SP	Description
1-216-670-11	s	RES, CHIP METAL 6.2k 1% 1/10W
1-216-671-11	s	RES, CHIP METAL 6.8k 1% 1/10W
1-216-672-11	s	RES, CHIP METAL 7.5k 1% 1/10W
1-216-673-11	s	RES, CHIP METAL 8.2k 1% 1/10W
1-216-674-11	s	RES, CHIP METAL 9.1k 1% 1/10W
1-216-675-11	s	RES, CHIP METAL 10k 1% 1/10W
1-216-676-11	s	RES, CHIP METAL 11k 1% 1/10W
1-216-677-11	s	RES, CHIP METAL 12k 1% 1/10W
1-216-678-11	s	RES, CHIP METAL 13k 1% 1/10W
1-216-679-11	s	RES, CHIP METAL 15k 1% 1/10W
1-216-680-11	s	RES, CHIP METAL 16k 1% 1/10W
1-216-681-11	s	RES, CHIP METAL 18k 1% 1/10W
1-216-682-11	s	RES, CHIP METAL 20k 1% 1/10W
1-216-683-11	s	RES, CHIP METAL 22k 1% 1/10W
1-216-684-11	s	RES, CHIP METAL 24k 1% 1/10W
1-216-685-11	s	RES, CHIP METAL 27k 1% 1/10W
1-216-686-11	s	RES, CHIP METAL 30k 1% 1/10W
1-216-687-11	s	RES, CHIP METAL 33k 1% 1/10W
1-216-688-11	s	RES, CHIP METAL 36k 1% 1/10W
1-216-689-11	s	RES, CHIP METAL 39k 1% 1/10W
1-216-690-11	s	RES, CHIP METAL 43k 1% 1/10W
1-216-691-11	s	RES, CHIP METAL 49k 1% 1/10W
1-216-692-11	s	RES, CHIP METAL 51k 1% 1/10W
1-216-693-11	s	RES, CHIP METAL 56k 1% 1/10W
1-216-694-11	s	RES, CHIP METAL 62k 1% 1/10W
1-216-695-11	s	RES, CHIP METAL 68k 1% 1/10W
1-216-696-11	s	RES, CHIP METAL 75k 1% 1/10W
1-216-697-11	s	RES, CHIP METAL 82k 1% 1/10W
1-216-698-11	s	RES, CHIP METAL 91k 1% 1/10W
1-216-699-11	s	RES, CHIP METAL 100k 1% 1/10W

RESISTOR, CARBON

Part No.	SP	Description
1-249-381-11	s	RES, CARBON 1.0 5% 1/6W
1-249-382-11	s	RES, CARBON 1.2 5% 1/6W
1-249-383-11	s	RES, CARBON 1.5 5% 1/6W
1-249-384-11	s	RES, CARBON 1.8 5% 1/6W
1-249-385-11	s	RES, CARBON 2.2 5% 1/6W
1-249-386-11	s	RES, CARBON 2.7 5% 1/6W
1-249-387-11	s	RES, CARBON 3.3 5% 1/6W
1-249-388-11	s	RES, CARBON 3.9 5% 1/6W
1-249-389-11	s	RES, CARBON 4.7 5% 1/6W
1-249-390-11	s	RES, CARBON 5.6 5% 1/6W
1-249-391-11	s	RES, CARBON 6.8 5% 1/6W
1-249-392-11	s	RES, CARBON 8.2 5% 1/6W
1-249-393-11	s	RES, CARBON 10 5% 1/6W
1-249-394-11	s	RES, CARBON 12 5% 1/6W
1-249-395-11	s	RES, CARBON 15 5% 1/6W
1-249-396-11	s	RES, CARBON 18 5% 1/6W
1-249-397-11	s	RES, CARBON 22 5% 1/6W
1-249-398-11	s	RES, CARBON 27 5% 1/6W
1-249-399-11	s	RES, CARBON 33 5% 1/6W
1-249-400-11	s	RES, CARBON 39 5% 1/6W
1-249-401-11	s	RES, CARBON 47 5% 1/6W
1-249-402-11	s	RES, CARBON 56 5% 1/6W
1-249-403-11	s	RES, CARBON 68 5% 1/6W
1-215-394-00	s	RES, METAL 75 1% 1/6W
1-249-404-11	s	RES, CARBON 82 5% 1/6W
1-249-405-11	s	RES, CARBON 100 5% 1/6W
1-249-406-11	s	RES, CARBON 120 5% 1/6W
1-249-407-11	s	RES, CARBON 150 5% 1/6W
1-249-408-11	s	RES, CARBON 180 5% 1/6W
1-249-409-11	s	RES, CARBON 220 5% 1/6W
1-249-410-11	s	RES, CARBON 270 5% 1/6W
1-249-411-11	s	RES, CARBON 330 5% 1/6W
1-249-412-11	s	RES, CARBON 390 5% 1/6W
1-249-413-11	s	RES, CARBON 470 5% 1/6W
1-249-414-11	s	RES, CARBON 560 5% 1/6W
1-249-415-11	s	RES, CARBON 680 5% 1/6W
1-249-416-11	s	RES, CARBON 820 5% 1/6W
1-249-417-11	s	RES, CARBON 1.0k 5% 1/6W
1-249-418-11	s	RES, CARBON 1.2k 5% 1/6W
1-249-419-11	s	RES, CARBON 1.5k 5% 1/6W
1-249-420-11	s	RES, CARBON 1.8k 5% 1/6W
1-249-421-11	s	RES, CARBON 2.2k 5% 1/6W
1-249-422-11	s	RES, CARBON 2.7k 5% 1/6W
1-249-423-11	s	RES, CARBON 3.3k 5% 1/6W
1-249-424-11	s	RES, CARBON 3.9k 5% 1/6W
1-249-425-11	s	RES, CARBON 4.7k 5% 1/6W
1-249-426-11	s	RES, CARBON 5.6k 5% 1/6W
1-249-427-11	s	RES, CARBON 6.8k 5% 1/6W
1-249-428-11	s	RES, CARBON 8.2k 5% 1/6W
1-249-429-11	s	RES, CARBON 10k 5% 1/6W
1-249-430-11	s	RES, CARBON 12k 5% 1/6W
1-249-431-11	s	RES, CARBON 15k 5% 1/6W
1-249-432-11	s	RES, CARBON 18k 5% 1/6W
1-249-433-11	s	RES, CARBON 22k 5% 1/6W
1-249-434-11	s	RES, CARBON 27k 5% 1/6W

(RESISTOR, CARBON)

Part No.	SP	Description
1-249-435-11	s	RES, CARBON 33k 5% 1/6W
1-249-436-11	s	RES, CARBON 39k 5% 1/6W
1-249-437-11	s	RES, CARBON 47k 5% 1/6W
1-249-438-11	s	RES, CARBON 56k 5% 1/6W
1-249-439-11	s	RES, CARBON 68k 5% 1/6W
1-249-440-11	s	RES, CARBON 82k 5% 1/6W
1-249-441-11	s	RES, CARBON 100k 5% 1/6W
1-215-471-00	s	RES, METAL 120k 1% 1/6W
1-215-473-00	s	RES, METAL 150k 1% 1/6W
1-215-475-00	s	RES, METAL 180k 1% 1/6W
1-215-477-00	s	RES, METAL 220k 1% 1/6W
1-215-479-00	s	RES, METAL 270k 1% 1/6W
1-215-481-00	s	RES, METAL 330k 1% 1/6W
1-215-483-00	s	RES, METAL 390k 1% 1/6W
1-215-485-00	s	RES, METAL 470k 1% 1/6W
1-215-487-00	s	RES, METAL 560k 1% 1/6W
1-215-489-00	s	RES, METAL 680k 1% 1/6W
1-215-491-00	s	RES, METAL 820k 1% 1/6W
1-215-493-00	s	RES, METAL 1.0M 1% 1/6W

INDUCTOR, MICRO

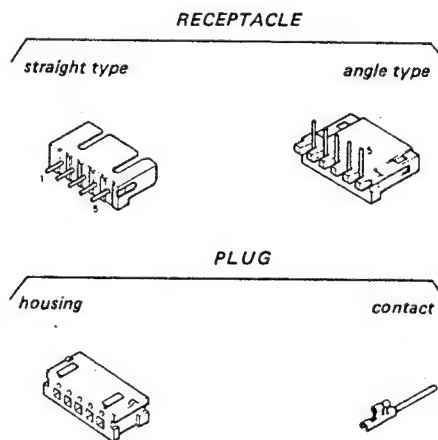
Part No.	SP	Description
1-408-397-00	s	INDUCTOR, MICRO 1.0 5%
1-408-399-00	s	INDUCTOR, MICRO 1.5 5%
1-408-400-00	s	INDUCTOR, MICRO 1.8 5%
1-408-401-00	s	INDUCTOR, MICRO 2.2 5%
1-408-403-00	s	INDUCTOR, MICRO 3.3 5%
1-408-404-00	s	INDUCTOR, MICRO 3.9 5%
1-408-405-00	s	INDUCTOR, MICRO 4.7 5%
1-408-406-00	s	INDUCTOR, MICRO 5.6 5%
1-408-407-00	s	INDUCTOR, MICRO 6.8 5%
1-408-408-00	s	INDUCTOR, MICRO 8.2 5%
1-408-409-00	s	INDUCTOR, MICRO 10 5%
1-408-410-00	s	INDUCTOR, MICRO 12 5%
1-408-411-00	s	INDUCTOR, MICRO 15 5%
1-408-412-00	s	INDUCTOR, MICRO 18 5%
1-408-413-00	s	INDUCTOR, MICRO 22 5%
1-408-414-00	s	INDUCTOR, MICRO 27 5%
1-408-415-00	s	INDUCTOR, MICRO 33 5%
1-408-416-00	s	INDUCTOR, MICRO 39 5%
1-408-417-00	s	INDUCTOR, MICRO 47 5%
1-408-418-00	s	INDUCTOR, MICRO 56 5%
1-408-419-00	s	INDUCTOR, MICRO 68 5%
1-408-420-00	s	INDUCTOR, MICRO 82 5%
1-408-421-00	s	INDUCTOR, MICRO 100 5%
1-408-422-00	s	INDUCTOR, MICRO 120 5%
1-408-423-00	s	INDUCTOR, MICRO 150 5%
1-408-424-00	s	INDUCTOR, MICRO 180 5%
1-408-425-00	s	INDUCTOR, MICRO 220 5%
1-408-426-00	s	INDUCTOR, MICRO 270 5%
1-408-427-00	s	INDUCTOR, MICRO 330 5%
1-408-428-00	s	INDUCTOR, MICRO 390 5%
1-408-429-00	s	INDUCTOR, MICRO 470 5%
1-410-116-11	s	INDUCTOR, MICRO 560 5%
1-410-492-11	s	INDUCTOR, MICRO 680 5%
1-410-493-11	s	INDUCTOR, MICRO 820 5%
1-410-494-11	s	INDUCTOR, MICRO 1000 5%

CONNECTOR, RECEPTACLE (STRAIGHT TYPE)
CONNECTOR, RECEPTACLE (ANGLE TYPE)
CONNECTOR, HOUSING
CONNECTOR, CONTACT AWG24-30/AWG32

CONNECTOR, RECEPTACLE (STRAIGHT TYPE)
CONNECTOR, RECEPTACLE (ANGLE TYPE)
CONNECTOR, HOUSING
CONNECTOR, CONTACT AWG24-30/AWG32

Part No.	SP	Description
1-564-001-11	o	RECEPTACLE 2P MALE (STRAIGHT TYPE)
1-564-012-11	o	RECEPTACLE 2P MALE (ANGLE TYPE)
1-562-147-11	o	HOUSING 2P
1-564-026-21	o	CONTACT AWG24-30
1-564-681-21	o	CONTACT AWG32
1-564-002-11	o	RECEPTACLE 3P MALE (STRAIGHT TYPE)
1-564-013-11	o	RECEPTACLE 3P MALE (ANGLE TYPE)
1-562-148-11	o	HOUSING 3P
1-564-026-21	o	CONTACT AWG24-30
1-564-681-21	o	CONTACT AWG32
1-564-003-11	o	RECEPTACLE 4P MALE (STRAIGHT TYPE)
1-564-014-11	o	RECEPTACLE 4P MALE (ANGLE TYPE)
1-562-149-11	o	HOUSING 4P
1-564-026-21	o	CONTACT AWG24-30
1-564-681-21	o	CONTACT AWG32
1-564-004-11	o	RECEPTACLE 5P MALE (STRAIGHT TYPE)
1-564-015-11	o	RECEPTACLE 5P MALE (ANGLE TYPE)
1-562-150-11	o	HOUSING 5P
1-564-026-21	o	CONTACT AWG24-30
1-564-681-21	o	CONTACT AWG32
1-564-005-11	o	RECEPTACLE 6P MALE (STRAIGHT TYPE)
1-564-016-11	o	RECEPTACLE 6P MALE (ANGLE TYPE)
1-562-151-11	o	HOUSING 6P
1-564-026-21	o	CONTACT AWG24-30
1-564-681-21	o	CONTACT AWG32
1-564-006-11	o	RECEPTACLE 7P MALE (STRAIGHT TYPE)
1-564-017-11	o	RECEPTACLE 7P MALE (ANGLE TYPE)
1-562-152-11	o	HOUSING 7P
1-564-026-21	o	CONTACT AWG24-30
1-564-681-21	o	CONTACT AWG32
1-564-007-11	o	RECEPTACLE 8P MALE (STRAIGHT TYPE)
1-564-018-11	o	RECEPTACLE 8P MALE (ANGLE TYPE)
1-562-153-11	o	HOUSING 8P
1-564-026-21	o	CONTACT AWG24-30
1-564-681-21	o	CONTACT AWG32
1-564-008-41	o	RECEPTACLE 9P MALE (STRAIGHT TYPE)
1-564-019-11	o	RECEPTACLE 9P MALE (ANGLE TYPE)
1-562-154-11	o	HOUSING 9P
1-564-026-21	o	CONTACT AWG24-30
1-564-681-21	o	CONTACT AWG32
1-564-009-11	o	RECEPTACLE 10P MALE (STRAIGHT TYPE)
1-564-020-11	o	RECEPTACLE 10P MALE (ANGLE TYPE)
1-562-155-11	o	HOUSING 10P
1-564-026-21	o	CONTACT AWG24-30
1-564-681-21	o	CONTACT AWG32
1-564-010-21	o	RECEPTACLE 11P MALE (STRAIGHT TYPE)
1-564-021-11	o	RECEPTACLE 11P MALE (ANGLE TYPE)
1-562-156-11	o	HOUSING 11P
1-564-026-21	o	CONTACT AWG24-30
1-564-681-21	o	CONTACT AWG32
1-564-011-11	o	RECEPTACLE 12P MALE (STRAIGHT TYPE)
1-564-022-11	o	RECEPTACLE 12P MALE (ANGLE TYPE)
1-562-157-11	o	HOUSING 12P
1-564-026-21	o	CONTACT AWG24-30
1-564-681-21	o	CONTACT AWG32

Part No.	SP	Description
1-564-683-11	o	RECEPTACLE 13P MALE (STRAIGHT TYPE)
1-564-743-11	o	RECEPTACLE 13P MALE (ANGLE TYPE)
1-562-627-11	o	HOUSING 13P
1-564-026-21	o	CONTACT AWG24-30
1-564-681-21	o	CONTACT AWG32
1-564-069-11	o	RECEPTACLE 14P MALE (STRAIGHT TYPE)
1-564-630-11	o	RECEPTACLE 14P MALE (ANGLE TYPE)
1-562-185-11	o	HOUSING 14P
1-564-026-21	o	CONTACT AWG24-30
1-564-681-21	o	CONTACT AWG32
1-564-855-11	o	RECEPTACLE 15P MALE (STRAIGHT TYPE)
1-564-877-11	o	RECEPTACLE 15P MALE (ANGLE TYPE)
1-562-958-11	o	HOUSING 15P
1-564-026-21	o	CONTACT AWG24-30
1-564-681-21	o	CONTACT AWG32



AC-93A BOARD

Ref. No.
or Q'ty Part No. SP Description

1-626-309-22 o PRINTED CIRCUIT BOARD, AC-93A

CN1 A1-506-371-00 o 2P PLUG (L)

F1 A1-532-203-11 s FUSE, TIME-LAG

AU-101A BOARD

Ref. No.
or Q'ty Part No. SP Description

1pc A-6713-344-A o MOUNTED CIRCUIT BOARD, AU-101A

C101 1-162-280-31 s CERAMIC 82PF 10% 50V
C102 1-162-287-31 s CERAMIC 270PF 10% 50V
C103 1-162-288-31 s CERAMIC 330PF 10% 50V
C106 1-162-286-31 s CERAMIC 220PF 10% 50V
C110 1-123-875-11 s ELECT 10uF 20% 50V

C113 1-126-103-11 s ELECT 470uF 20% 16V
C114 1-136-684-11 s FILM 0.0022uF 2% 100V
C115 1-136-684-11 s FILM 0.0022uF 2% 100V
C116 1-136-682-11 s FILM 0.0039uF 2% 100V
C117 1-131-345-00 s TANTALUM 0.47uF 10% 35V

C119 1-130-738-00 s FILM 0.015uF 1% 100V
C122 1-130-765-00 s FILM 0.056uF 2% 100V
C123 1-136-683-11 s FILM 0.0056uF 2% 100V
C124 1-130-736-11 s FILM 0.01uF 1% 100V
C125 1-123-875-11 s ELECT 10uF 20% 50V

C126 1-123-875-11 s ELECT 10uF 20% 50V
C127 1-162-290-31 s CERAMIC 470PF 10% 50V
C128 1-126-233-11 s ELECT 22uF 20% 50V
C129 1-162-215-31 s CERAMIC 47PF 5% 50V
C130 1-126-233-11 s ELECT 22uF 20% 50V

C131 1-123-875-11 s ELECT 10uF 20% 50V
C132 1-162-290-31 s CERAMIC 470PF 10% 50V
C133 1-124-499-11 s ELECT, NONPOLAR 1uF 20% 50V
C134 1-124-499-11 s ELECT, NONPOLAR 1uF 20% 50V
C201 1-162-280-31 s CERAMIC 82PF 10% 50V

C202 1-162-287-31 s CERAMIC 270PF 10% 50V
C203 1-162-288-31 s CERAMIC 330PF 10% 50V
C206 1-162-286-31 s CERAMIC 220PF 10% 50V
C210 1-123-875-11 s ELECT 10uF 20% 50V
C211 1-126-103-11 s ELECT 470uF 20% 16V

C212 1-136-684-11 s FILM 0.0022uF 2% 100V
C213 1-136-684-11 s FILM 0.0022uF 2% 100V
C214 1-136-682-11 s FILM 0.0039uF 2% 100V
C215 1-131-345-00 s TANTALUM 0.47uF 10% 35V
C217 1-130-738-00 s FILM 0.015uF 1% 100V

C220 1-130-765-00 s FILM 0.056uF 2% 100V
C221 1-136-683-11 s FILM 0.0056uF 2% 100V
C222 1-130-736-11 s FILM 0.01uF 1% 100V
C223 1-123-875-11 s ELECT 10uF 20% 50V
C224 1-123-875-11 s ELECT 10uF 20% 50V

C225 1-126-233-11 s ELECT 22uF 20% 50V
C226 1-162-215-31 s CERAMIC 47PF 5% 50V
C227 1-126-233-11 s ELECT 22uF 20% 50V
C228 1-123-875-11 s ELECT 10uF 20% 50V
C229 1-124-499-11 s ELECT, NONPOLAR 1uF 20% 50V

C230 1-124-499-11 s ELECT, NONPOLAR 1uF 20% 50V
C303 1-161-485-00 s CERAMIC 0.1uF 50V
C305 1-162-290-31 s CERAMIC 470PF 10% 50V
C306 1-131-341-00 s TANTALUM 0.1uF 10% 35V
C308 1-162-718-11 s CERAMIC 220PF 1% 50V

C309 1-162-288-31 s CERAMIC 330PF 10% 50V
C310 1-162-286-31 s CERAMIC 220PF 10% 50V
C315 1-123-875-11 s ELECT 10uF 20% 50V
C316 1-162-285-31 s CERAMIC 180PF 10% 50V
C317 1-123-875-11 s ELECT 10uF 20% 50V

NOTE: Please see the General Purpose Electrical List
of capacitors and resistors that are not listed in
the parts list.

(AU-101A BOARD)

Ref. No. or Q'ty	Part No.	SP Description
C318	1-162-294-31	s CERAMIC 0.001uF 10% 50V
C320	1-123-875-11	s ELECT 10uF 20% 50V
C321	1-123-875-11	s ELECT 10uF 20% 50V
C323	1-162-290-31	s CERAMIC 470PF 10% 50V
C324	1-131-341-00	s TANTALUM 0.1uF 10% 35V
C326	1-162-718-11	s CERAMIC 220PF 1% 50V
C327	1-162-288-31	s CERAMIC 330PF 10% 50V
C328	1-162-286-31	s CERAMIC 220PF 10% 50V
C333	1-123-875-11	s ELECT 10uF 20% 50V
C334	1-162-285-31	s CERAMIC 180PF 10% 50V
C335	1-123-875-11	s ELECT 10uF 20% 50V
C336	1-162-294-31	s CERAMIC 0.001uF 10% 50V
C338	1-123-875-11	s ELECT 10uF 20% 50V
C339	1-123-875-11	s ELECT 10uF 20% 50V
C342	1-126-233-11	s ELECT 22uF 20% 50V
C345	1-130-190-00	s FILM 0.039uF 5% 100V
C346	1-162-286-31	s CERAMIC 220PF 10% 50V
C347	1-136-287-11	s FILM 0.0047uF 5% 100V
C348	1-162-196-31	s CERAMIC 5.6PF 10% 50V
C349	1-162-292-31	s CERAMIC 680PF 10% 50V
C350	1-131-370-00	s TANTALUM 6.8uF 10% 16V
C351	1-136-293-11	s FILM 0.0082uF 5% 100V
C352	1-131-365-00	s TANTALUM 10uF 10% 20V
C353	1-131-343-00	s TANTALUM 0.22uF 10% 35V
C357	1-126-233-11	s ELECT 22uF 20% 50V
C360	1-162-286-31	s CERAMIC 220PF 10% 50V
C361	1-130-190-00	s FILM 0.039uF 5% 100V
C362	1-136-287-11	s FILM 0.0047uF 5% 100V
C363	1-162-196-31	s CERAMIC 5.6PF 10% 50V
C364	1-162-292-31	s CERAMIC 680PF 10% 50V
C365	1-136-293-11	s FILM 0.0082uF 5% 100V
C366	1-131-370-00	s TANTALUM 6.8uF 10% 16V
C367	1-131-365-00	s TANTALUM 10uF 10% 20V
C368	1-131-343-00	s TANTALUM 0.22uF 10% 35V
C370	1-162-215-31	s CERAMIC 47PF 5% 50V
C374	1-124-927-11	s ELECT 4.7uF 20% 100V
C375	1-126-103-11	s ELECT 470uF 20% 16V
C404	1-162-282-31	s CERAMIC 100PF 10% 50V
C406	1-123-875-11	s ELECT 10uF 20% 50V
C407	1-126-103-11	s ELECT 470uF 20% 16V
C408	1-101-003-00	s CERAMIC 0.0047uF 50V
C409	1-101-003-00	s CERAMIC 0.0047uF 50V
C410	1-126-233-11	s ELECT 22uF 20% 50V
C411	1-126-233-11	s ELECT 22uF 20% 50V
C418	1-123-875-11	s ELECT 10uF 20% 50V
C419	1-126-233-11	s ELECT 22uF 20% 50V
C420	1-126-233-11	s ELECT 22uF 20% 50V
C421	1-126-233-11	s ELECT 22uF 20% 50V
C422	1-126-233-11	s ELECT 22uF 20% 50V
C424	1-162-199-31	s CERAMIC 10PF 5% 50V
C425	1-162-199-31	s CERAMIC 10PF 5% 50V
CN1	1-506-471-11	o CONNECTOR, 6P, MALE
CN2	1-506-469-11	o CONNECTOR, 4P, MALE
CN3	1-506-471-11	o CONNECTOR, 6P, MALE
CN4	1-506-471-11	o CONNECTOR, 6P, MALE
CN5	1-506-468-11	o CONNECTOR, 3P, MALE

(AU-101A BOARD)

Ref. No. or Q'ty	Part No.	SP Description
CN6	1-506-471-11	o CONNECTOR, 6P, MALE
CN7	1-506-471-11	o CONNECTOR, 6P, MALE
D301	8-719-911-19	s DIODE 1SS119
D302	8-719-911-19	s DIODE 1SS119
D303	8-719-911-19	s DIODE 1SS119
D304	8-719-911-19	s DIODE 1SS119
D305	8-719-911-19	s DIODE 1SS119
D306	8-719-911-19	s DIODE 1SS119
D307	8-719-120-53	s DIODE RD5.1ES-L2
D401	8-719-121-15	s DIODE RD8.2ES-L3
D402	8-719-200-02	s DIODE 10E2
D403	8-719-200-02	s DIODE 10E2
D404	8-719-911-19	s DIODE 1SS119
D405	8-719-911-19	s DIODE 1SS119
FL101	1-236-017-11	s FILTER, LOW-PASS
FL201	1-236-017-11	s FILTER, LOW-PASS
FL301	1-236-011-11	s FILTER, LOW-PASS
FL302	1-236-012-11	s FILTER, BANDPASS 310KH
FL303	1-236-013-11	s FILTER, BANDPASS 540KH
FL304	1-236-003-11	s FILTER, LOW-PASS
IC101	8-759-700-04	s IC NJM2043D-D
IC102	8-752-018-80	s IC CX20188
IC103	8-759-208-12	s IC TC4016BPHB
IC104	8-759-745-61	s IC NJM4560D-D
IC301	8-759-420-06	s IC AN6391NK
IC302	8-759-420-06	s IC AN6391NK
IC303	8-752-014-80	s IC CX20148
IC304	8-759-745-61	s IC NJM4560D-D
IC401	8-759-208-12	s IC TC4016BPHB
IC402	8-759-208-12	s IC TC4016BPHB
IC403	8-759-745-61	s IC NJM4560D-D
IC404	8-759-745-56	s IC NJM4556D
L301	1-410-064-11	s INDUCTOR 2.7mH
L302	1-410-064-11	s INDUCTOR 2.7mH
L303	1-410-482-31	s INDUCTOR 100uH
Q101	8-729-201-05	s TRANSISTOR 2SC2878-B
Q102	8-729-201-05	s TRANSISTOR 2SC2878-B
Q103	8-729-900-89	s TRANSISTOR DTC144ES
Q104	8-729-201-05	s TRANSISTOR 2SC2878-B
Q105	8-729-201-05	s TRANSISTOR 2SC2878-B
Q106	8-729-105-73	s TRANSISTOR 2SK523-L2
Q107	8-729-900-89	s TRANSISTOR DTC144ES
Q108	8-729-900-89	s TRANSISTOR DTC144ES
Q201	8-729-201-05	s TRANSISTOR 2SC2878-B
Q202	8-729-201-05	s TRANSISTOR 2SC2878-B
Q203	8-729-201-05	s TRANSISTOR 2SC2878-B
Q204	8-729-201-05	s TRANSISTOR 2SC2878-B
Q205	8-729-900-89	s TRANSISTOR DTC144ES
Q206	8-729-105-73	s TRANSISTOR 2SK523-L2
Q301	8-729-603-50	s TRANSISTOR 2SC403SP-5
Q302	8-729-603-50	s TRANSISTOR 2SC403SP-5
Q303	8-729-603-50	s TRANSISTOR 2SC403SP-5
Q304	8-729-900-65	s TRANSISTOR DTA144ES
Q305	8-729-177-33	s TRANSISTOR 2SD773-4

NOTE: Please see the General Purpose Electrical List of capacitors and resistors that are not listed in the parts list.

(AU-101A BOARD)

Ref. No.

or Q'ty Part No. SP Description

Q306 8-729-603-50 s TRANSISTOR 2SC403SP-5
 Q401 8-729-900-89 s TRANSISTOR DTC144ES
 Q402 8-729-900-89 s TRANSISTOR DTC144ES
 Q403 8-729-117-54 s TRANSISTOR 2SA1175-F
 Q404 8-729-117-54 s TRANSISTOR 2SA1175-F

Q405 8-729-177-33 s TRANSISTOR 2SD773-4
 Q406 8-729-113-34 s TRANSISTOR 2SB733-5
 Q407 8-729-201-05 s TRANSISTOR 2SC2878-B
 Q408 8-729-201-05 s TRANSISTOR 2SC2878-B
 Q409 8-729-201-05 s TRANSISTOR 2SC2878-B

Q410 8-729-900-65 s TRANSISTOR DTA144ES
 Q411 8-729-900-65 s TRANSISTOR DTA144ES

R101 1-247-889-00 s CARBON 270K 5% 1/4W
 R104 1-247-883-00 s CARBON 150K 5% 1/4W
 R112 1-247-903-00 s CARBON 1M 5% 1/4W
 R117 1-247-852-11 s CARBON 7.5K 5% 1/4W
 R118 1-247-854-11 s CARBON 9.1K 5% 1/4W

R128 1-247-887-00 s CARBON 220K 5% 1/4W
 R138 1-247-887-00 s CARBON 220K 5% 1/4W
 R143 1-247-903-00 s CARBON 1M 5% 1/4W
 R144 1-247-903-00 s CARBON 1M 5% 1/4W
 R201 1-247-889-00 s CARBON 270K 5% 1/4W

R204 1-247-883-00 s CARBON 150K 5% 1/4W
 R211 1-247-903-00 s CARBON 1M 5% 1/4W
 R216 1-247-852-11 s CARBON 7.5K 5% 1/4W
 R218 1-247-854-11 s CARBON 9.1K 5% 1/4W
 R236 1-215-434-11 s CARBON 2.2K 1% 1/6W

R237 1-247-903-00 s CARBON 1M 5% 1/4W
 R238 1-247-903-00 s CARBON 1M 5% 1/4W
 R353 1-247-885-00 s CARBON 180K 5% 1/4W
 R406 1-247-885-00 s CARBON 180K 5% 1/4W

RV101 1-228-999-00 s RES, ADJ, METAL 470K
 RV102 1-228-993-00 s RES, ADJ, METAL 4.7K
 RV103 1-228-994-00 s RES, ADJ, METAL 10K
 RV104 1-228-995-00 s RES, ADJ, METAL 22K
 RV201 1-228-999-00 s RES, ADJ, METAL 470K

RV202 1-228-993-00 s RES, ADJ, METAL 4.7K
 RV203 1-228-994-00 s RES, ADJ, METAL 10K
 RV204 1-228-995-00 s RES, ADJ, METAL 22K
 RV301 1-228-991-00 s RES, ADJ, METAL 2.2K
 RV303 1-228-995-00 s RES, ADJ, METAL 22K

RV304 1-228-991-00 s RES, ADJ, METAL 2.2K
 RV305 1-228-995-00 s RES, ADJ, METAL 22K

S101 1-570-602-11 s SWITCH, DIP, 2-CKT
 S201 1-570-602-11 s SWITCH, DIP, 2-CKT
 S401 1-570-863-11 s SWITCH, SLIDE

CCM-2 BOARD

Ref. No.

or Q'ty Part No. SP Description

1-623-198-11 o PRINTED CIRCUIT BOARD, CCM-2

M1007 1-541-376-11 s MOTOR, DC (DNR-4700A)

NOTE: Please see the General Purpose Electrical List
 of capacitors and resistors that are not listed in
 the parts list.

CL-14 BOARD

Ref. No.

or Q'ty Part No. SP Description

1-622-602-11 o PRINTED CIRCUIT BOARD, CL-14

CN332 1-563-969-11 o F.P.C 7P

R1 1-249-421-11 s CARBON 2.2K 5% 1/4W

R2 1-249-421-11 s CARBON 2.2K 5% 1/4W

R3 1-249-421-11 s CARBON 2.2K 5% 1/4W

R4 1-249-421-11 s CARBON 2.2K 5% 1/4W

R5 1-249-421-11 s CARBON 2.2K 5% 1/4W

CP-123 BOARD

Ref. No.

or Q'ty Part No. SP Description

Ipc 1-626-306-13 o PRINTED CIRCUIT BOARD, CP-123

C1 1-123-875-11 s ELECT 10uF 20% 50V

C2 1-123-875-11 s ELECT 10uF 20% 50V

C4 1-161-494-00 s CERAMIC 0.022uF 25V

C11 1-124-360-00 s ELECT 1000uF 20% 16V

C23 1-124-360-00 s ELECT 1000uF 20% 16V

CN1 1-564-002-00 o CONNECTOR, 3P, MALE

CN2 1-564-004-00 o CONNECTOR, 5P, MALE

CN3 1-564-004-00 o CONNECTOR, 5P, MALE

CN4 1-564-003-00 o CONNECTOR, 4P, MALE

CN5 1-564-003-00 o CONNECTOR, 4P, MALE

CN6 1-564-002-00 o CONNECTOR, 3P, MALE

CN7 1-564-005-00 o CONNECTOR, 6P, MALE

CN8 1-564-004-00 o CONNECTOR, 5P, MALE

CN9 1-564-003-00 o CONNECTOR, 4P, MALE

CN10 1-564-005-00 o CONNECTOR, 6P, MALE

CN11 1-564-003-00 o CONNECTOR, 4P, MALE

D1 8-719-200-02 s DIODE 10E2

D2 8-719-200-02 s DIODE 10E2

D3 8-719-200-02 s DIODE 10E2

D4 8-719-200-02 s DIODE 10E2

D5 8-719-911-19 s DIODE 1SS119

D6 8-719-109-82 s DIODE RD4.7ESB3

L1 1-410-478-11 s INDUCTOR 47uH

Q2 8-729-201-04 s TRANSISTOR 2SC2878-A

Q3 8-729-178-54 s TRANSISTOR 2SC2785-F

Q5 8-729-603-50 s TRANSISTOR 2SC403SP-5

Q6 8-729-603-50 s TRANSISTOR 2SC403SP-5

Q12 8-729-603-50 s TRANSISTOR 2SC403SP-5

Q13 8-729-603-50 s TRANSISTOR 2SC403SP-5

NOTE: Please see the General Purpose Electrical List
of capacitors and resistors that are not listed in
the parts list.

DC-36 BOARD

Ref. No.

or Q'ty Part No. SP Description

1pc A-8723-367-A o MOUNTED CIRCUIT BOARD. DC-36
1pc 1-561-432-00 o CONTACT, FEMALE
1pc 1-561-424-11 o HOUSING, 5P

C1 1-126-103-11 s ELECT 470uF 20% 16V
C2 1-126-103-11 s ELECT 470uF 20% 16V
C3 1-131-344-00 s TANTALUM 0.33uF 10% 35V
C5 1-126-103-11 s ELECT 470uF 20% 16V
C6 1-126-103-11 s ELECT 470uF 20% 16V

C7 1-126-103-11 s ELECT 470uF 20% 16V

CN1 1-564-003-00 o CONNECTOR, 4P. MALE
CN2 1-564-014-00 o CONNECTOR, 4P. MALE
CN3 1-564-014-00 o CONNECTOR, 4P. MALE
CN4 1-564-013-00 o CONNECTOR, 3P. MALE
CN5 1-564-022-21 o CONNECTOR, 12P. MALE

CN6 1-564-016-00 o CONNECTOR, 8P. MALE
CN8 1-564-014-00 o CONNECTOR, 4P. MALE
CN10 1-564-007-00 o CONNECTOR, 8P. MALE
CN11 1-564-007-00 o CONNECTOR, 8P. MALE

D1 8-719-200-02 s DIODE 10E2

DD1 1-464-967-11 s CONVERTER, DC-DC
12)DD2 1-464-967-11 s CONVERTER, DC-DC

IC1 8-749-930-52 s IC S1-3052V

L1 1-459-155-00 s COIL 45uH
L2 1-459-155-00 s COIL 45uH
12)L3 1-459-155-00 s COIL 45uH

DE-15 BOARD

Ref. No.

or Q'ty Part No. SP Description

1-622-608-11 o PRINTED CIRCUIT BOARD, DE-15
1-559-907-11 o WIRE, FLEXIBLE CARD

NOTE: Please see the General Purpose Electrical List
of capacitors and resistors that are not listed in
the parts list.

DM-74 BOARD

Ref. No.

or Q'ty Part No. SP Description

1pc	A-6711-980-A	o MOUNTED CIRCUIT BOARD, DM-74
2pcs	3-657-153-00	o HINGE
2pcs	3-646-090-00	s RIVET, NYLON
C1	1-107-048-00	s MICA 6.8PF 500V
C2	1-107-206-00	s MICA 15PF 5% 500V
C5	1-107-048-00	s MICA 6.8PF 500V
C9	1-107-048-00	s MICA 6.8PF 500V
C10	1-107-206-00	s MICA 15PF 5% 500V
C13	1-107-048-00	s MICA 6.8PF 500V
C16	1-107-076-00	s MICA 43PF 5% 50V
C17	1-107-046-00	s MICA 4.7PF 500V
C18	1-107-157-00	s MICA 27PF 5% 500V
C20	1-107-157-00	s MICA 27PF 5% 500V
C28	1-107-159-00	s MICA 33PF 5% 500V
C43	1-162-729-11	s CERAMIC 620PF 1% 50V
C49	1-162-729-11	s CERAMIC 620PF 1% 50V
C53	1-123-875-11	s ELECT 10uF 20% 50V
C66	1-124-589-11	s ELECT 47uF 20% 16V
C67	1-124-589-11	s ELECT 47uF 20% 16V
C69	1-124-589-11	s ELECT 47uF 20% 16V
C70	1-126-157-11	s ELECT 10uF 20% 16V
C74	1-124-589-11	s ELECT 47uF 20% 16V
C82	1-123-875-11	s ELECT 10uF 20% 50V
C83	1-123-875-11	s ELECT 10uF 20% 50V
C103	1-163-099-00	s CERAMIC, CHIP 18PF 5% 50V
C109	1-163-037-11	s CERAMIC, CHIP 0.022uF 5% 25V
C110	1-163-037-11	s CERAMIC, CHIP 0.022uF 5% 25V
C121	1-124-927-11	s ELECT 4.7uF 20% 100V
1)C122	1-102-074-00	s CERAMIC 0.001uF 10% 50V
1)C123	1-161-021-11	s CERAMIC 0.047uF 10% 25V
20)C124	1-162-712-11	s CERAMIC 120PF 5% 50V
C202	1-107-208-00	s MICA 18PF 5% 500V
C204	1-107-075-00	s MICA 39PF 5% 50V
C205	1-107-208-00	s MICA 18PF 5% 500V
C207	1-107-208-00	s MICA 18PF 5% 500V
C210	1-107-075-00	s MICA 39PF 5% 50V
C211	1-107-208-00	s MICA 18PF 5% 500V
C215	1-163-103-00	s CERAMIC, CHIP 127PF 5% 50V
C241	1-162-729-11	s CERAMIC 620PF 1% 50V
C242	1-107-159-00	s MICA 33PF 5% 500V
C250	1-123-875-11	s ELECT 10uF 20% 50V
C253	1-123-875-11	s ELECT 10uF 20% 50V
C259	1-124-589-11	s ELECT 47uF 20% 16V
C260	1-124-589-11	s ELECT 47uF 20% 16V
C261	1-124-589-11	s ELECT 47uF 20% 16V
C263	1-126-157-11	s ELECT 10uF 20% 16V
C267	1-124-589-11	s ELECT 47uF 20% 16V
C283	1-107-157-00	s MICA 27PF 5% 500V
C284	1-107-157-00	s MICA 27PF 5% 500V
C285	1-107-044-00	s MICA 3.3PF 500V
C289	1-163-037-11	s CERAMIC, CHIP 0.022uF 5% 25V
C290	1-163-037-11	s CERAMIC, CHIP 0.022uF 5% 25V
C301	1-124-927-11	s ELECT 4.7uF 20% 100V
CN1	1-506-471-11	o CONNECTOR, 6P, MALE
CN2	1-506-471-11	o CONNECTOR, 6P, MALE

(DM-74 BOARD)

Ref. No.

or Q'ty Part No. SP Description

CN3	1-506-475-11	o CONNECTOR, 10P, MALE
CN4	1-506-471-11	o CONNECTOR, 6P, MALE
CN5	1-506-471-11	o CONNECTOR, 6P, MALE
CN6	1-506-471-11	o CONNECTOR, 6P, MALE
CN7	1-506-473-11	o CONNECTOR, 8P, MALE
D1	8-719-100-03	s DIODE 1S2835
D3	8-719-104-10	s DIODE 1SS99
D4	8-719-104-10	s DIODE 1SS99
D201	8-719-100-03	s DIODE 1S2835
DL201	1-415-154-00	s DELAY LINE 35ns
FB1	1-535-178-00	s BEAD, FERRITE
FB2	1-535-178-00	s BEAD, FERRITE
FB201	1-535-178-00	s BEAD, FERRITE
FB202	1-535-178-00	s BEAD, FERRITE
FL1	1-236-281-11	s FILTER, LOW-PASS
FL2	1-235-759-11	s FILTER, LOW-PASS
FL3	1-236-179-11	s FILTER, LOW-PASS
FL201	1-235-760-11	s FILTER, LOW-PASS
FL202	1-235-759-11	s FILTER, LOW-PASS
IC1	8-751-340-10	s IC CX134A
IC2	1-464-602-11	s CIRCUIT UNIT, HF
IC4	8-759-601-00	s IC CX20004A
IC6	8-759-208-14	s IC TC4066BPHB
IC7	8-769-401-89	s TRANSISTOR TX429M
IC8	8-759-969-13	s IC SN16913P
IC9	8-752-320-32	s IC CXL5001P
IC10	8-749-938-90	s IC BX-389
IC11	8-759-202-12	s IC TC74HC02P
IC12	8-759-145-58	s IC UPC4558C
13) IC14	8-759-700-14	s IC NJM78M09A
14) IC14	8-759-982-34	s IC RC7809FA
IC201	8-751-340-10	s IC CX134A
IC202	8-741-114-02	s IC BX1140
IC203	8-759-601-00	s IC CX20004A
IC204	8-749-938-90	s IC BX-389
IC205	8-759-208-14	s IC TC4066BPHB
IC206	8-752-320-32	s IC CXL5001P
IC207	8-749-938-90	s IC BX-389
IC208	8-769-401-89	s TRANSISTOR TX429M
IC209	8-759-969-13	s IC SN16913P
IC210	8-759-145-58	s IC UPC4558C
L3	1-410-482-31	s INDUCTOR 100uH
L4	1-410-482-31	s INDUCTOR 100uH
L5	1-410-482-31	s INDUCTOR 100uH
L8	1-410-482-31	s INDUCTOR 100uH
L10	1-410-482-31	s INDUCTOR 100uH
L11	1-410-482-31	s INDUCTOR 100uH
L13	1-410-482-31	s INDUCTOR 100uH
L15	1-410-470-11	s INDUCTOR 10uH
L16	1-410-466-41	s INDUCTOR 4.7uH
L17	1-410-468-11	s INDUCTOR 6.8uH
L18	1-410-482-31	s INDUCTOR 100uH
L19	1-410-482-31	s INDUCTOR 100uH
L21	1-410-482-31	s INDUCTOR 100uH
L22	1-410-482-31	s INDUCTOR 100uH

NOTE: Please see the General Purpose Electrical List of capacitors and resistors that are not listed in the parts list.

(DM-74 BOARD)

Ref. No. or Q'ty	Part No.	SP Description
L23	1-410-482-31 s	INDUCTOR 100uH
L24	1-410-482-31 s	INDUCTOR 100uH
L26	1-410-482-31 s	INDUCTOR 100uH
L27	1-410-482-31 s	INDUCTOR 100uH
L28	1-410-482-31 s	INDUCTOR 100uH
L203	1-410-482-31 s	INDUCTOR 100uH
L204	1-410-470-11 s	INDUCTOR 10uH
L205	1-410-482-31 s	INDUCTOR 100uH
L206	1-410-482-31 s	INDUCTOR 100uH
L207	1-410-482-31 s	INDUCTOR 100uH
L208	1-410-470-11 s	INDUCTOR 10uH
L211	1-410-482-31 s	INDUCTOR 100uH
L212	1-410-482-31 s	INDUCTOR 100uH
L213	1-410-482-31 s	INDUCTOR 100uH
L214	1-410-482-31 s	INDUCTOR 100uH
L215	1-410-482-31 s	INDUCTOR 100uH
L216	1-410-482-31 s	INDUCTOR 100uH
L217	1-410-482-31 s	INDUCTOR 100uH
L218	1-410-482-31 s	INDUCTOR 100uH
L221	1-410-470-11 s	INDUCTOR 10uH
L222	1-410-470-11 s	INDUCTOR 10uH
Q1	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q2	8-729-201-27 s	TRANSISTOR 2SC2715-Y
Q3	8-729-202-38 s	TRANSISTOR 2SC3326N-A
Q4	8-729-202-38 s	TRANSISTOR 2SC3326N-A
Q5	8-729-200-87 s	TRANSISTOR 2SC2714-Y
Q6	8-729-200-87 s	TRANSISTOR 2SC2714-Y
Q7	8-729-200-87 s	TRANSISTOR 2SC2714-Y
Q8	8-729-201-27 s	TRANSISTOR 2SC2715-Y
Q9	8-729-200-87 s	TRANSISTOR 2SC2714-Y
Q11	8-729-122-63 s	TRANSISTOR 2SA1226-E4
Q12	8-729-122-63 s	TRANSISTOR 2SA1226-E4
Q13	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q14	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q15	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q16	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q17	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q18	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q19	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q20	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q21	8-729-201-27 s	TRANSISTOR 2SC2715-Y
Q22	8-729-901-06 s	TRANSISTOR DTA144EK
Q23	8-729-201-27 s	TRANSISTOR 2SC2715-Y
Q24	8-729-201-27 s	TRANSISTOR 2SC2715-Y
Q25	8-729-201-27 s	TRANSISTOR 2SC2715-Y
Q26	8-729-201-27 s	TRANSISTOR 2SC2715-Y
Q27	8-729-201-27 s	TRANSISTOR 2SC2715-Y
Q28	8-729-901-01 s	TRANSISTOR DTC144EK
Q29	8-729-901-06 s	TRANSISTOR DTA144EK
Q30	8-729-201-27 s	TRANSISTOR 2SC2715-Y
Q31	8-729-202-38 s	TRANSISTOR 2SC3326N-A
Q32	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q33	8-729-603-50 s	TRANSISTOR 2SC403SP-5
Q34	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q35	8-729-201-27 s	TRANSISTOR 2SC2715-Y
Q36	8-729-201-27 s	TRANSISTOR 2SC2715-Y

(DM-74 BOARD)

Ref. No. or Q'ty	Part No.	SP Description
Q37	8-729-201-27 s	TRANSISTOR 2SC2715-Y
Q38	8-729-201-27 s	TRANSISTOR 2SC2715-Y
Q39	8-729-201-27 s	TRANSISTOR 2SC2715-Y
Q201	8-729-201-27 s	TRANSISTOR 2SC2715-Y
Q202	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q203	8-729-202-38 s	TRANSISTOR 2SC3326N-A
Q204	8-729-202-38 s	TRANSISTOR 2SC3326N-A
Q205	8-729-201-27 s	TRANSISTOR 2SC2715-Y
Q206	8-729-201-27 s	TRANSISTOR 2SC2715-Y
Q208	8-729-201-27 s	TRANSISTOR 2SC2715-Y
Q209	8-729-201-27 s	TRANSISTOR 2SC2715-Y
Q210	8-729-201-27 s	TRANSISTOR 2SC2715-Y
Q213	8-729-201-27 s	TRANSISTOR 2SC2715-Y
Q214	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q215	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q216	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q217	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q218	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q219	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q220	8-729-200-87 s	TRANSISTOR 2SC2714-Y
Q222	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q223	8-729-603-50 s	TRANSISTOR 2SC403SP-5
Q224	8-729-271-22 s	TRANSISTOR 2SC2712-G
R10	1-216-066-00 s	METAL, CHIP 5.1K 5% 1/10W
R133	1-216-022-00 s	METAL, CHIP 75 5% 1/10W
R213	1-216-066-00 s	METAL, CHIP 5.1K 5% 1/10W
R268	1-216-022-00 s	METAL, CHIP 75 5% 1/10W
RV1	1-228-990-00 s	RES, ADJ, METAL 1K
RV2	1-228-990-00 s	RES, ADJ, METAL 1K
RV3	1-228-991-00 s	RES, ADJ, METAL 2.2K
RV4	1-228-994-00 s	RES, ADJ, METAL 10K
RV5	1-228-991-00 s	RES, ADJ, METAL 2.2K
RV6	1-228-995-00 s	RES, ADJ, METAL 22K
RV7	1-228-991-00 s	RES, ADJ, METAL 2.2K
RV12	1-228-996-00 s	RES, ADJ, METAL 47K
RV13	1-228-989-00 s	RES, ADJ, METAL 470
RV15	1-228-990-00 s	RES, ADJ, METAL 1K
RV16	1-228-989-00 s	RES, ADJ, METAL 470
RV17	1-228-989-00 s	RES, ADJ, METAL 470
RV201	1-228-990-00 s	RES, ADJ, METAL 1K
RV202	1-228-990-00 s	RES, ADJ, METAL 1K
RV203	1-228-991-00 s	RES, ADJ, METAL 2.2K
RV204	1-228-994-00 s	RES, ADJ, METAL 10K
RV205	1-228-995-00 s	RES, ADJ, METAL 22K
RV206	1-228-991-00 s	RES, ADJ, METAL 2.2K
RV209	1-228-989-00 s	RES, ADJ, METAL 470
RV210	1-228-996-00 s	RES, ADJ, METAL 47K
RV211	1-228-989-00 s	RES, ADJ, METAL 470
RV212	1-228-990-00 s	RES, ADJ, METAL 1K
S1	1-570-863-11 s	SWITCH, SLIDE
S2	1-570-863-11 s	SWITCH, SLIDE
S3	1-570-863-11 s	SWITCH, SLIDE
S201	1-570-863-11 s	SWITCH, SLIDE
S202	1-570-863-11 s	SWITCH, SLIDE

NOTE: Please see the General Purpose Electrical List of capacitors and resistors that are not listed in the parts list.

DP-87 BOARD

Ref. No. or Q'ty	Part No.	SP Description
C101	1-124-589-11 s	ELECT 47uF 20% 16V
D101	8-719-942-19 s	LED LB-402VK
D102	8-719-942-19 s	LED LB-402VK
D103	8-719-942-19 s	LED LB-402VK
D104	8-719-942-19 s	LED LB-402VK
D105	8-719-902-27 s	LED EBR3402S, RED
IC101	8-749-900-36 s	IC BX-1393
Q101	8-729-900-63 s	TRANSISTOR DTA124ES
Q102	8-729-117-54 s	TRANSISTOR 2SA1175-F
S101	1-552-539-00 s	SWITCH, TACTILE
S102	1-552-539-00 s	SWITCH, TACTILE

DUS-174 BOARD

Ref. No. or Q'ty	Part No.	SP Description
1pc	1-626-312-11 o	PRINTED CIRCUIT BOARD, DUS-174
C3	1-162-290-31 s	CERAMIC 470PF 10% 50V
C4	1-162-290-31 s	CERAMIC 470PF 10% 50V
CN1	1-562-708-11 o	CONNECTOR, 13P, FEMALE
CN2	1-564-005-00 o	CONNECTOR, 6P, MALE
CN3	1-564-003-00 o	CONNECTOR, 4P, MALE
CN4	1-564-002-00 o	CONNECTOR, 3P, MALE
CN5	1-564-004-00 o	CONNECTOR, 5P, MALE
Q1	8-729-820-03 s	TRANSISTOR 2SB1140-S
15)Q2	8-729-201-04 s	TRANSISTOR 2SC2878-A
16)Q2	8-729-140-96 s	TRANSISTOR 2SD774-34
Q3	8-729-820-03 s	TRANSISTOR 2SB1140-S
15)Q4	8-729-384-46 s	TRANSISTOR 2SA844-C
16)Q4	8-729-140-97 s	TRANSISTOR 2SB734-34
Q5	8-729-820-03 s	TRANSISTOR 2SB1140-S
15)Q6	8-729-201-04 s	TRANSISTOR 2SC2878-A
16)Q6	8-729-140-96 s	TRANSISTOR 2SD774-34
Q7	8-729-820-03 s	TRANSISTOR 2SB1140-S
15)Q8	8-729-384-46 s	TRANSISTOR 2SA844-C
16)Q8	8-729-140-97 s	TRANSISTOR 2SB734-34
R5	1-216-365-00 s	METAL 0.47 5% 2W

NOTE: Please see the General Purpose Electrical List of capacitors and resistors that are not listed in the parts list.

DUS-175 BOARD

Ref. No.

or Q'ty Part No. SP Description

1pc 1-626-313-11 o PRINTED CIRCUIT BOARD, DUS-175

C5 1-162-290-31 s CERAMIC 470PF 10% 50V

C6 1-162-290-31 s CERAMIC 470PF 10% 50V

15)C7 1-161-021-11 s ELECT 0.047uF 10% 25V

16)C7 1-126-101-11 s ELECT 100uF 20% 16V

CN1 1-562-708-11 o CONNECTOR, 13P, FEMALE

CN2 1-564-005-00 o CONNECTOR, 6P, MALE

CN3 1-564-004-00 o CONNECTOR, 5P, MALE

CN4 1-564-003-00 o CONNECTOR, 4P, MALE

CN5 1-564-003-00 o CONNECTOR, 4P, MALE

CN6 1-564-002-00 o CONNECTOR, 3P, MALE

Q1 8-729-820-03 s TRANSISTOR 2SB1140-S

15)Q2 8-729-201-04 s TRANSISTOR 2SC2878-A

16)Q2 8-729-140-96 s TRANSISTOR 2SD774-34

Q3 8-729-820-03 s TRANSISTOR 2SB1140-S

15)Q4 8-729-384-46 s TRANSISTOR 2SA844-C

16)Q4 8-729-140-97 s TRANSISTOR 2SB734-34

Q5 8-729-820-03 s TRANSISTOR 2SB1140-S

15)Q6 8-729-201-04 s TRANSISTOR 2SC2878-A

16)Q6 8-729-140-96 s TRANSISTOR 2SD774-34

Q7 8-729-820-03 s TRANSISTOR 2SB1140-S

15)Q8 8-729-384-46 s TRANSISTOR 2SA844-C

16)Q8 8-729-140-97 s TRANSISTOR 2SB734-34

R5 Δ 1-216-365-00 s METAL 0.47 5% 2W

EN-66A BOARD

Ref. No.

or Q'ty Part No. SP Description

1pc A-6711-981-A o MOUNTED CIRCUIT BOARD, EN-66A

1pc 3-682-613-00 o CLIP (C), ANCHOR

1pc 4-835-134-00 s SCREW, TD 3.8X2.5

1pc 3-725-099-01 o LID, EN CASE (1)

C13 1-123-661-00 s ELECT 100uF 20% 6.3V

C21 1-126-233-11 s ELECT 22uF 20% 50V

C26 1-162-876-11 s CERAMIC 75PF 5% 50V

C27 1-126-233-11 s ELECT 22uF 20% 50V

C28 1-126-233-11 s ELECT 22uF 20% 50V

C34 1-123-875-11 s ELECT 10uF 20% 50V

10)C37 1-124-584-00 s ELECT 100uF 20% 10V

9)C40 1-123-875-11 s ELECT 10uF 20% 50V

10)C40 1-124-261-00 s ELECT 10uF 20% 50V

C54 1-131-347-00 s TANTALUM 1uF 10% 35V

C55 1-131-347-00 s TANTALUM 1uF 10% 35V

C67 1-124-589-11 s ELECT 47uF 20% 16V

10)C68 1-124-589-11 s ELECT 47uF 20% 16V

C72 1-126-157-11 s ELECT 10uF 20% 16V

C73 1-131-345-00 s TANTALUM 0.47uF 10% 35V

C82 1-123-875-11 s ELECT 10uF 20% 50V

C109 1-123-661-00 s ELECT 100uF 20% 6.3V

C111 1-124-584-00 s ELECT 100uF 20% 10V

C113 1-163-037-11 s CERAMIC, CHIP 0.022uF 5% 25V

C114 1-124-589-11 s ELECT 47uF 20% 16V

C129 1-123-661-00 s ELECT 100uF 20% 6.3V

C131 1-124-584-00 s ELECT 100uF 20% 10V

C133 1-163-037-11 s CERAMIC, CHIP 0.022uF 5% 25V

C134 1-124-589-11 s ELECT 47uF 20% 16V

C137 1-124-589-11 s ELECT 47uF 20% 16V

C140 1-124-589-11 s ELECT 47uF 20% 16V

C146 1-124-234-00 s ELECT 22uF 20% 16V

C150 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V

C152 1-124-234-00 s ELECT 22uF 20% 16V

C156 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V

C158 1-124-234-00 s ELECT 22uF 20% 16V

C162 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V

C164 1-124-234-00 s ELECT 22uF 20% 16V

C168 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V

C171 1-162-732-11 s CERAMIC 820PF 1% 50V

C176 1-162-732-11 s CERAMIC 820PF 1% 50V

C186 1-123-661-00 s ELECT 100uF 20% 6.3V

C190 1-123-661-00 s ELECT 100uF 20% 6.3V

C191 1-123-661-00 s ELECT 100uF 20% 6.3V

C192 1-124-584-00 s ELECT 100uF 20% 10V

C193 1-123-661-00 s ELECT 100uF 20% 6.3V

C194 1-124-584-00 s ELECT 100uF 20% 10V

C305 1-123-875-11 s ELECT 10uF 20% 50V

9)C313 1-123-875-11 s ELECT 10uF 20% 50V

10)C313 1-126-157-11 s ELECT 10uF 20% 16V

9)C316 1-123-875-11 s ELECT 10uF 20% 50V

10)C316 1-126-157-11 s ELECT 10uF 20% 16V

C318 1-126-233-11 s ELECT 22uF 20% 50V

C333 1-124-589-11 s ELECT 47uF 20% 16V

C342 1-163-119-00 s CERAMIC, CHIP 120PF 5% 50V

C350 1-123-875-11 s ELECT 10uF 20% 50V

C353 1-162-881-11 s CERAMIC 150PF 5% 50V

C364 1-124-499-11 s ELECT, NONPOLAR 1uF 20% 50V

NOTE: Please see the General Purpose Electrical List
of capacitors and resistors that are not listed in
the parts list.

(EN-66A BOARD)

(EN-66A BOARD)

Ref. No. or Q'ty	Part No.	SP Description
C379	1-124-499-11 s	ELECT, NONPOLAR 1uF 20% 50V
C381	1-124-589-11 s	ELECT 47uF 20% 16V
C384	1-123-875-11 s	ELECT 10uF 20% 50V
C385	1-124-589-11 s	ELECT 47uF 20% 16V
9) C386	1-124-499-11 s	ELECT, NONPOLAR 1uF 20% 50V
10) C386	1-126-160-11 s	ELECT 1 20% 50V
C388	1-124-589-11 s	ELECT 47uF 20% 16V
C390	1-124-589-11 s	ELECT 47uF 20% 16V
C391	1-124-589-11 s	ELECT 47uF 20% 16V
C397	1-162-875-11 s	CERAMIC 68PF 5% 50V
C403	1-124-589-11 s	ELECT 47uF 20% 16V
C407	1-124-589-11 s	ELECT 47uF 20% 16V
C408	1-123-875-11 s	ELECT 10uF 20% 50V
C459	1-124-499-11 s	ELECT, NONPOLAR 1uF 20% 50V
C461	1-163-099-00 s	CERAMIC, CHIP 18PF 5% 50V
C462	1-126-233-11 s	ELECT 22uF 20% 50V
C463	1-126-233-11 s	ELECT 22uF 20% 50V
C470	1-163-119-00 s	CERAMIC, CHIP 120PF 5% 50V
C603	1-126-233-11 s	ELECT 22uF 20% 50V
C613	1-126-233-11 s	ELECT 22uF 20% 50V
C614	1-126-233-11 s	ELECT 22uF 20% 50V
CN1	1-506-475-11 o	CONNECTOR, 10P, MALE
CN2	1-506-473-11 o	CONNECTOR, 8P, MALE
CN3	1-506-475-11 o	CONNECTOR, 10P, MALE
CN4	1-506-471-11 o	CONNECTOR, 6P, MALE
CV301	1-141-260-00 s	CAP, TRIMMER 50PF
D1	8-719-101-23 s	DIODE 1SS123
D2	8-719-101-23 s	DIODE 1SS123
D3	8-719-101-23 s	DIODE 1SS123
D4	8-719-101-23 s	DIODE 1SS123
D5	8-719-105-52 s	DIODE RD3.6M-B2
D6	8-719-101-23 s	DIODE 1SS123
D7	8-719-101-23 s	DIODE 1SS123
D15	8-719-101-23 s	DIODE 1SS123
D301	8-719-100-03 s	DIODE 1S2835
D302	8-719-101-23 s	DIODE 1SS123
D303	8-719-101-23 s	DIODE 1SS123
D305	8-719-101-23 s	DIODE 1SS123
D306	8-719-101-23 s	DIODE 1SS123
D307	8-719-101-23 s	DIODE 1SS123
D308	8-719-100-05 s	DIODE 1S2837
D309	8-719-101-23 s	DIODE 1SS123
D311	8-719-101-23 s	DIODE 1SS123
D313	8-719-104-10 s	DIODE 1SS99
D314	8-719-104-10 s	DIODE 1SS99
D315	8-719-104-10 s	DIODE 1SS99
D316	8-719-104-10 s	DIODE 1SS99
1) D317	8-719-106-17 s	DIODE RD6.8M-B2
2) D317	8-719-106-09 s	DIODE RD6.2M-B3
D318	8-719-106-17 s	DIODE RD6.8M-B2
D319	8-719-101-23 s	DIODE 1SS123
D320	8-719-101-23 s	DIODE 1SS123
D322	8-719-101-23 s	DIODE 1SS123
D601	8-719-101-23 s	DIODE 1SS123
D602	8-719-101-23 s	DIODE 1SS123
D603	8-713-300-00 s	DIODE 1T33

Ref. No. or Q'ty	Part No.	SP Description
FB1	1-535-178-00 s	BEAD, FERRITE
FB2	1-535-178-00 s	BEAD, FERRITE
FB4	1-535-178-00 s	BEAD, FERRITE
FB5	1-535-178-00 s	BEAD, FERRITE
FB6	1-535-178-00 s	BEAD, FERRITE
FB7	1-535-178-00 s	BEAD, FERRITE
FB8	1-535-178-00 s	BEAD, FERRITE
FB9	1-535-178-00 s	BEAD, FERRITE
FB10	1-535-178-00 s	BEAD, FERRITE
FB11	1-535-178-00 s	BEAD, FERRITE
FB301	1-535-178-00 s	BEAD, FERRITE
FB302	1-535-178-00 s	BEAD, FERRITE
FB304	1-535-178-00 s	BEAD, FERRITE
FL1	1-235-322-11 s	FILTER, LOW-PASS
FL2	1-236-059-11 s	FILTER, LOW-PASS
FL3	1-235-321-11 s	FILTER, LOW-PASS
FL4	1-236-058-11 s	COMPOSITION CIRCUIT BLOCK
FL5	1-236-058-11 s	COMPOSITION CIRCUIT BLOCK
FL301	1-235-181-00 s	FILTER, BANDPASS 4.43MHz
13) IC1	8-759-700-14 s	IC NJM78M09A
14) IC1	8-759-982-34 s	IC RC7809FA
IC2	8-752-320-32 s	IC CXL5001P
IC3	8-759-208-10 s	IC TC4053BPHB
IC4	8-759-200-60 s	IC TA7060AP
IC6	8-759-902-21 s	IC SN74LS221N
IC7	8-759-901-23 s	IC SN74LS123N
IC8	8-759-990-82 s	IC TL082CP
IC10	8-759-990-84 s	IC TL084CN
IC11	8-759-906-24 s	IC SN74LS624N
IC12	8-759-201-47 s	IC TA7357AP
IC13	8-759-103-19 s	IC UPC319C
IC14	8-759-000-99 s	IC MC74HC74N
IC15	8-759-990-82 s	IC TL082CP
IC16	8-759-902-21 s	IC SN74LS221N
IC18	8-759-902-21 s	IC SN74LS221N
IC19	8-759-902-21 s	IC SN74LS221N
IC20	8-759-902-21 s	IC SN74LS221N
IC21	8-759-902-21 s	IC SN74LS221N
IC22	8-759-202-11 s	IC TC74HC00P
IC23	8-749-901-21 s	IC BX1461
IC24	8-759-990-82 s	IC TL082CP
IC25	1-464-608-21 s	CIRCUIT UNIT, VCO
IC26	8-759-902-21 s	IC SN74LS221N
IC27	8-759-902-21 s	IC SN74LS221N
IC28	8-749-901-21 s	IC BX1461
IC30	1-464-608-21 s	CIRCUIT UNIT, VCO
IC31	8-759-202-13 s	IC TC74HC004P
IC33	8-759-922-29 s	IC CX23084
IC35	8-759-202-21 s	IC TC74HC32P
IC39	8-752-320-39 s	IC CXL5002P
IC40	8-752-320-32 s	IC CXL5001P
IC41	8-752-320-39 s	IC CXL5002P
IC42	8-752-320-32 s	IC CXL5001P
IC43	8-759-208-08 s	IC TC4052BPHB
IC44	8-759-400-06 s	IC AN608P

NOTE: Please see the General Purpose Electrical List of capacitors and resistors that are not listed in the parts list.

(EN-66A BOARD)

Ref. No. or Q'ty	Part No.	SP Description
IC45	8-759-400-06	s IC AN608P
IC301	8-759-201-47	s IC TA7357AP
IC302	8-759-902-21	s IC SN74LS221N
IC303	8-759-990-84	s IC TL084CN
IC304	8-759-729-03	s IC NJM2903D
IC305	8-759-202-11	s IC TC74HC00P
IC306	1-464-605-11	s CIRCUIT UNIT, ED
IC307	8-759-345-38	s IC HD14538BP
IC309	8-759-000-99	s IC MC74HCT4N
IC310	8-759-902-21	s IC SN74LS221N
IC311	8-759-202-11	s IC TC74HC00P
IC312	8-759-208-10	s IC TC4030BPHB
IC313	8-759-920-14	s IC S-8053ALR
IC314	8-759-993-00	s IC CX7993A
IC315	8-759-204-94	s IC TC74HC00F
IC316	8-759-205-21	s IC TC74HC221F
IC319	8-759-200-60	s IC TA7060AP
IC320	8-759-200-60	s IC TA7060AP
IC321	8-759-202-11	s IC TC74HC00P
IC322	8-752-015-81	s IC CX20158
IC324	8-759-990-82	s IC TL082CP
IC325	8-759-208-10	s IC TC4053BPHB
IC326	8-759-990-84	s IC TL084CN
IC329	8-759-202-11	s IC TC74HC00P
IC332	8-759-906-59	s IC CX22017
IC334	8-749-938-90	s IC BX-389
IC340	8-759-708-02	s IC NJM78L02A
IC341	8-759-700-64	s IC NJM79L03A
IC601	8-759-902-21	s IC SN74LS221N
IC602	8-759-990-84	s IC TL084CN
IC603	8-759-902-21	s IC SN74LS221N
L1	1-410-482-31	s INDUCTOR 100uH
L2	1-410-482-31	s INDUCTOR 100uH
L3	1-410-471-11	s INDUCTOR 12uH
L4	1-410-482-31	s INDUCTOR 100uH
L5	1-410-482-31	s INDUCTOR 100uH
L7	1-410-482-31	s INDUCTOR 100uH
L8	1-410-482-31	s INDUCTOR 100uH
L9	1-410-482-31	s INDUCTOR 100uH
L10	1-410-482-31	s INDUCTOR 100uH
L11	1-410-482-31	s INDUCTOR 100uH
L12	1-410-482-31	s INDUCTOR 100uH
L13	1-410-482-31	s INDUCTOR 100uH
L16	1-410-482-31	s INDUCTOR 100uH
L17	1-410-482-31	s INDUCTOR 100uH
L18	1-410-482-31	s INDUCTOR 100uH
L19	1-410-482-31	s INDUCTOR 100uH
L20	1-410-482-31	s INDUCTOR 100uH
L21	1-410-482-31	s INDUCTOR 100uH
L22	1-410-482-31	s INDUCTOR 100uH
L23	1-410-482-31	s INDUCTOR 100uH
L25	1-410-482-31	s INDUCTOR 100uH
L26	1-410-478-11	s INDUCTOR 47uH
L27	1-410-478-11	s INDUCTOR 47uH
L28	1-410-482-31	s INDUCTOR 100uH
L29	1-410-482-31	s INDUCTOR 100uH

(EN-66A BOARD)

Ref. No. or Q'ty	Part No.	SP Description
L31	1-410-482-31	s INDUCTOR 100uH
L301	1-410-482-31	s INDUCTOR 100uH
L302	1-410-482-31	s INDUCTOR 100uH
L303	1-410-482-31	s INDUCTOR 100uH
L304	1-410-482-31	s INDUCTOR 100uH
L305	1-410-482-31	s INDUCTOR 100uH
L306	1-410-471-11	s INDUCTOR 12uH
L307	1-410-482-31	s INDUCTOR 100uH
L308	1-410-482-31	s INDUCTOR 100uH
L309	1-410-482-31	s INDUCTOR 100uH
L310	1-410-482-31	s INDUCTOR 100uH
L311	1-410-482-31	s INDUCTOR 100uH
L312	1-410-470-11	s INDUCTOR 10uH
L313	1-410-482-31	s INDUCTOR 100uH
L314	1-410-482-31	s INDUCTOR 100uH
L315	1-410-482-31	s INDUCTOR 100uH
L316	1-410-482-31	s INDUCTOR 100uH
L317	1-410-478-11	s INDUCTOR 47uH
L318	1-410-478-11	s INDUCTOR 47uH
L319	1-410-482-31	s INDUCTOR 100uH
L320	1-410-482-31	s INDUCTOR 100uH
L321	1-410-482-31	s INDUCTOR 100uH
L322	1-410-482-31	s INDUCTOR 100uH
L323	1-410-482-31	s INDUCTOR 100uH
L324	1-410-482-31	s INDUCTOR 100uH
L325	1-410-482-31	s INDUCTOR 100uH
L327	1-410-071-11	s INDUCTOR 10mH
L328	1-410-071-11	s INDUCTOR 10mH
L330	1-410-482-31	s INDUCTOR 100uH
L331	1-410-482-31	s INDUCTOR 100uH
L332	1-410-482-31	s INDUCTOR 100uH
L333	1-410-482-31	s INDUCTOR 100uH
L334	1-410-482-31	s INDUCTOR 100uH
LV301	1-407-571-00	s COIL, VAR 22uH
LV601	1-407-567-00	s COIL, VAR 4.7uH
Q1	8-729-271-22	s TRANSISTOR 2SC2712-G
Q2	8-729-271-22	s TRANSISTOR 2SC2712-G
Q3	8-729-271-22	s TRANSISTOR 2SC2712-G
Q4	8-729-271-22	s TRANSISTOR 2SC2712-G
Q5	8-729-271-22	s TRANSISTOR 2SC2712-G
Q6	8-729-271-22	s TRANSISTOR 2SC2712-G
Q7	8-729-271-22	s TRANSISTOR 2SC2712-G
Q8	8-729-271-22	s TRANSISTOR 2SC2712-G
Q9	8-729-102-07	s TRANSISTOR 2SC2223-F13
Q10	8-729-102-07	s TRANSISTOR 2SC2223-F13
Q11	8-729-102-07	s TRANSISTOR 2SC2223-F13
Q12	8-729-102-07	s TRANSISTOR 2SC2223-F13
Q13	8-729-122-63	s TRANSISTOR 2SA1226-E4
Q14	8-729-102-07	s TRANSISTOR 2SC2223-F13
Q15	8-729-122-63	s TRANSISTOR 2SA1226-E4
Q16	8-729-102-07	s TRANSISTOR 2SC2223-F13
Q17	8-729-271-22	s TRANSISTOR 2SC2712-G
Q18	8-729-271-22	s TRANSISTOR 2SC2712-G
Q19	8-729-271-22	s TRANSISTOR 2SC2712-G
Q20	8-729-271-22	s TRANSISTOR 2SC2712-G

NOTE: Please see the General Purpose Electrical List of capacitors and resistors that are not listed in the parts list.

(EN-66A BOARD)

Ref. No. or Q'ty	Part No.	SP Description
Q21	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q22	8-729-122-63 s	TRANSISTOR 2SA1226-E4
Q23	8-729-102-07 s	TRANSISTOR 2SC2223-F13
Q24	8-729-102-07 s	TRANSISTOR 2SC2223-F13
Q25	8-729-122-63 s	TRANSISTOR 2SA1226-E4
Q26	8-729-122-63 s	TRANSISTOR 2SA1226-E4
Q27	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q28	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q29	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q30	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q31	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q32	8-729-200-87 s	TRANSISTOR 2SC2714-Y
Q33	8-729-216-21 s	TRANSISTOR 2SA1162-Y
Q34	8-729-216-21 s	TRANSISTOR 2SA1162-Y
Q35	8-729-216-21 s	TRANSISTOR 2SA1162-Y
Q36	8-729-216-21 s	TRANSISTOR 2SA1162-Y
Q37	8-729-216-21 s	TRANSISTOR 2SA1162-Y
Q38	8-729-216-21 s	TRANSISTOR 2SA1162-Y
Q39	8-729-216-21 s	TRANSISTOR 2SA1162-Y
Q40	8-729-216-21 s	TRANSISTOR 2SA1162-Y
Q41	8-729-216-21 s	TRANSISTOR 2SA1162-Y
Q42	8-729-216-21 s	TRANSISTOR 2SA1162-Y
Q43	8-729-216-21 s	TRANSISTOR 2SA1162-Y
Q44	8-729-216-21 s	TRANSISTOR 2SA1162-Y
Q45	8-729-216-21 s	TRANSISTOR 2SA1162-Y
Q46	8-729-216-21 s	TRANSISTOR 2SA1162-Y
Q47	8-729-216-21 s	TRANSISTOR 2SA1162-Y
Q48	8-729-216-21 s	TRANSISTOR 2SA1162-Y
Q49	8-729-216-21 s	TRANSISTOR 2SA1162-Y
Q50	8-729-216-21 s	TRANSISTOR 2SA1162-Y
Q51	8-729-109-42 s	TRANSISTOR 2SK94-X2
Q52	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q53	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q54	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q55	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q56	8-729-109-42 s	TRANSISTOR 2SK94-X2
Q57	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q58	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q59	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q60	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q61	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q62	8-729-901-01 s	TRANSISTOR DTC144EK
Q63	8-729-901-06 s	TRANSISTOR DTA144EK
Q64	8-729-109-43 s	TRANSISTOR 2SK94-X3
Q301	8-729-109-42 s	TRANSISTOR 2SK94-X2
Q302	8-729-122-63 s	TRANSISTOR 2SA1226-E4
Q303	8-729-901-01 s	TRANSISTOR DTC144EK
Q304	8-729-901-01 s	TRANSISTOR DTC144EK
Q305	8-729-901-01 s	TRANSISTOR DTC144EK
Q307	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q309	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q310	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q311	8-729-102-07 s	TRANSISTOR 2SC2223-F13
Q312	8-729-102-07 s	TRANSISTOR 2SC2223-F13
Q313	8-729-102-07 s	TRANSISTOR 2SC2223-F13
Q314	8-729-102-07 s	TRANSISTOR 2SC2223-F13
Q315	8-729-122-63 s	TRANSISTOR 2SA1226-E4
Q316	8-729-102-07 s	TRANSISTOR 2SC2223-F13
Q317	8-729-122-63 s	TRANSISTOR 2SA1226-E4
Q318	8-729-102-07 s	TRANSISTOR 2SC2223-F13
Q319	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q320	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q321	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q322	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q323	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q324	8-729-102-07 s	TRANSISTOR 2SC2223-F13
Q325	8-729-271-22 s	TRANSISTOR 2SC2712-G

NOTE: Please see the General Purpose Electrical List of capacitors and resistors that are not listed in the parts list.

(EN-66A BOARD)

Ref. No. or Q'ty	Part No.	SP Description
Q326	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q327	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q328	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q329	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q331	8-729-901-06 s	TRANSISTOR DTA144EK
Q333	8-729-216-21 s	TRANSISTOR 2SA1162-Y
Q334	8-729-109-42 s	TRANSISTOR 2SK94-X2
Q335	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q336	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q337	8-729-109-42 s	TRANSISTOR 2SK94-X2
Q338	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q339	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q340	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q341	8-729-901-06 s	TRANSISTOR DTA144EK
Q342	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q343	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q344	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q345	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q346	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q347	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q348	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q349	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q350	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q351	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q352	8-729-202-38 s	TRANSISTOR 2SC3326N-A
Q356	8-729-202-38 s	TRANSISTOR 2SC3326N-A
Q358	8-729-901-06 s	TRANSISTOR DTA144EK
Q359	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q360	8-729-102-07 s	TRANSISTOR 2SC2223-F13
Q361	8-729-102-07 s	TRANSISTOR 2SC2223-F13
Q362	8-729-102-07 s	TRANSISTOR 2SC2223-F13
Q363	8-729-109-42 s	TRANSISTOR 2SK94-X2
Q364	8-729-901-01 s	TRANSISTOR DTC144EK
Q365	8-729-201-27 s	TRANSISTOR 2SC2715-Y
Q366	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q367	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q368	8-729-202-38 s	TRANSISTOR 2SC3326N-A
Q601	8-729-122-63 s	TRANSISTOR 2SA1226-E4
Q602	8-729-102-07 s	TRANSISTOR 2SC2223-F13
Q603	8-729-109-43 s	TRANSISTOR 2SK94-X3
Q604	8-729-271-22 s	TRANSISTOR 2SC2712-G
Q605	8-729-271-22 s	TRANSISTOR 2SC2712-G
R120	1-216-038-00 s	METAL, CHIP 360 5% 1/10W
R502	1-216-748-11 s	METAL, CHIP 39K 1% 1/10W
RV1	1-228-995-00 s	RES, ADJ, METAL 22K
RV2	1-228-990-00 s	RES, ADJ, METAL 1K
RV3	1-228-989-00 s	RES, ADJ, METAL 470
RV4	1-228-994-00 s	RES, ADJ, METAL 10K
RV5	1-228-991-00 s	RES, ADJ, METAL 2.2K
RV6	1-228-990-00 s	RES, ADJ, METAL 1K
RV7	1-228-993-00 s	RES, ADJ, METAL 4.7K
RV8	1-228-993-00 s	RES, ADJ, METAL 4.7K
RV9	1-228-993-00 s	RES, ADJ, METAL 4.7K
RV10	1-228-994-00 s	RES, ADJ, METAL 10K
RV11	1-228-991-00 s	RES, ADJ, METAL 2.2K

(EN-66A BOARD)

Ref. No. or Q'ty	Part No.	SP Description
RV12	1-228-994-00 s	RES, ADJ, METAL 10K
RV13	1-228-994-00 s	RES, ADJ, METAL 10K
RV14	1-228-991-00 s	RES, ADJ, METAL 2.2K
RV15	1-228-995-00 s	RES, ADJ, METAL 22K
RV16	1-228-991-00 s	RES, ADJ, METAL 2.2K
RV17	1-228-995-00 s	RES, ADJ, METAL 22K
RV19	1-228-995-00 s	RES, ADJ, METAL 22K
RV21	1-228-995-00 s	RES, ADJ, METAL 22K
RV22	1-228-991-00 s	RES, ADJ, METAL 2.2K
RV23	1-228-991-00 s	RES, ADJ, METAL 2.2K
RV24	1-228-990-00 s	RES, ADJ, METAL 1K
RV25	1-228-994-00 s	RES, ADJ, METAL 10K
RV26	1-228-997-00 s	RES, ADJ, METAL 100K
RV301	1-228-995-00 s	RES, ADJ, METAL 22K
11) RV302	1-228-995-00 s	RES, ADJ, METAL 22K
12) RV302	1-228-996-00 s	RES, ADJ, METAL 47K
RV304	1-228-989-00 s	RES, ADJ, METAL 470
RV305	1-228-993-00 s	RES, ADJ, METAL 4.7K
RV306	1-228-993-00 s	RES, ADJ, METAL 4.7K
RV307	1-228-991-00 s	RES, ADJ, METAL 2.2K
RV308	1-228-994-00 s	RES, ADJ, METAL 10K
RV311	1-228-991-00 s	RES, ADJ, METAL 2.2K
RV312	1-228-994-00 s	RES, ADJ, METAL 10K
RV313	1-228-994-00 s	RES, ADJ, METAL 10K
RV314	1-228-994-00 s	RES, ADJ, METAL 10K
RV315	1-228-994-00 s	RES, ADJ, METAL 10K
RV316	1-228-996-00 s	RES, ADJ, METAL 47K
RV317	1-228-996-00 s	RES, ADJ, METAL 47K
RV318	1-228-993-00 s	RES, ADJ, METAL 4.7K
RV319	1-228-991-00 s	RES, ADJ, METAL 2.2K
RV320	1-228-993-00 s	RES, ADJ, METAL 4.7K
RV321	1-228-991-00 s	RES, ADJ, METAL 2.2K
RV322	1-228-989-00 s	RES, ADJ, METAL 470
RV323	1-228-989-00 s	RES, ADJ, METAL 470
RV324	1-228-990-00 s	RES, ADJ, METAL 1K
RV325	1-228-990-00 s	RES, ADJ, METAL 1K
RV326	1-230-682-11 s	RES, ADJ, CARBON 1M
RV327	1-228-989-00 s	RES, ADJ, METAL 470
RV328	1-228-990-00 s	RES, ADJ, METAL 1K
RV329	1-228-991-00 s	RES, ADJ, METAL 2.2K
RV330	1-228-990-00 s	RES, ADJ, METAL 1K
RV331	1-228-994-00 s	RES, ADJ, METAL 10K
RV601	1-228-994-00 s	RES, ADJ, METAL 10K
S1	1-570-863-11 s	SWITCH, SLIDE
S2	1-570-863-11 s	SWITCH, SLIDE
S301	1-570-863-11 s	SWITCH, SLIDE
S303	1-570-863-11 s	SWITCH, SLIDE
S304	1-570-863-11 s	SWITCH, SLIDE
S305	1-570-863-11 s	SWITCH, SLIDE
S306	1-570-863-11 s	SWITCH, SLIDE
TH1	1-800-198-XX s	THERMISTOR S-1K
X1	1-567-863-11 s	CRYSTAL, 10.664135MHz
X302	1-567-860-11 s	CRYSTAL 4.433618MHz

HP-38 BOARD

Ref. No. or Q'ty	Part No.	SP Description
	1-626-307-11 o	PRINTED CIRCUIT BOARD, HP-38
J1	1-507-863-31 s	JACK, LARGE TYPE
RV1	1-238-182-11 s	RES, VAR, CARBON 20K/20K

NOTE: Please see the General Purpose Electrical List
of capacitors and resistors that are not listed in
the parts list.

KY-130 BOARD

(KY-130 BOARD)

Ref. No. or Q'ty	Part No.	SP Description
1pc	A-6717-494-A	o MOUNTED CIRCUIT BOARD, KY-130
1pc	1-564-026-00	s CONTACT, FEMALE, AWG24-30
1pc	3-725-032-01	o HOLDER, SJA
7pcs	3-659-487-00	s HOLDER, BUZZER
7pcs	3-659-488-00	s PIN, BUZZER HOLDER
1pc	2-114-405-01	o HOLDER, LED
4pcs	3-725-025-01	o HOLDER, 7-SEG
1pc	1-507-195-21	s JACK, REMOTE
C2	1-101-006-00	s CERAMIC 0.047uF 50V
C3	1-124-589-11	s ELECT 47uF 20% 16V
C4	1-162-294-31	s CERAMIC 0.001uF 10% 50V
C6	1-162-211-31	s CERAMIC 33PF 5% 50V
C7	1-162-211-31	s CERAMIC 33PF 5% 50V
C8	1-124-589-11	s ELECT 47uF 20% 16V
C9	1-101-006-00	s CERAMIC 0.047uF 50V
C10	1-161-494-00	s CERAMIC 0.022uF 25V
C11	1-124-589-11	s ELECT 47uF 20% 16V
CN2	1-564-002-00	o CONNECTOR, 3P, MALE
CN3	1-564-011-21	o CONNECTOR, 12P, MALE
CN4	1-564-002-00	o CONNECTOR, 3P, MALE
CN5	1-564-009-00	o CONNECTOR, 10P, MALE
CN6	1-564-009-00	o CONNECTOR, 10P, MALE
CN7	1-564-002-00	o CONNECTOR, 3P, MALE
D2	8-719-911-19	s DIODE 1SS119
D3	8-719-911-19	s DIODE 1SS119
D4	8-719-911-19	s DIODE 1SS119
D6	8-719-911-19	s DIODE 1SS119
D7	8-719-911-19	s DIODE 1SS119
D8	8-719-911-19	s DIODE 1SS119
D9	8-719-911-19	s DIODE 1SS119
D10	8-719-800-86	s LED TLG255, GRN
D11	8-719-939-39	s LED GL5HD8, RED
D12	8-719-939-39	s LED GL5HD8, RED
D13	8-719-939-39	s LED GL5HD8, RED
D14	8-719-939-39	s LED GL5HD8, RED
D15	8-719-939-39	s LED GL5HD8, RED
D16	8-719-939-39	s LED GL5HD8, RED
D17	8-719-939-39	s LED GL5HD8, RED
D18	8-719-800-86	s LED TLG255, GRN
3)D101	8-719-942-19	s LED LB-402VK
4)D101	8-719-975-23	s LED LB-4021VK1
3)D102	8-719-942-19	s LED LB-402VK
4)D102	8-719-975-23	s LED LB-4021VK1
3)D103	8-719-942-19	s LED LB-402VK
4)D103	8-719-975-23	s LED LB-4021VK1
3)D104	8-719-942-19	s LED LB-402VK
4)D104	8-719-975-23	s LED LB-4021VK1
IC1	8-759-973-69	s IC MB88505-650M
Q1	8-729-117-54	s TRANSISTOR 2SA1175-F
Q2	8-729-117-54	s TRANSISTOR 2SA1175-F
Q3	8-729-117-54	s TRANSISTOR 2SA1175-F
Q4	8-729-900-63	s TRANSISTOR DTA124ES
Q5	8-729-900-63	s TRANSISTOR DTA124ES

Ref. No. or Q'ty	Part No.	SP Description
Q6	8-729-900-63	s TRANSISTOR DTA124ES
Q7	8-729-900-63	s TRANSISTOR DTA124ES
Q8	8-729-900-63	s TRANSISTOR DTA124ES
Q9	8-729-900-63	s TRANSISTOR DTA124ES
Q10	8-729-900-63	s TRANSISTOR DTA124ES
Q11	8-729-900-63	s TRANSISTOR DTA124ES
Q12	8-729-900-63	s TRANSISTOR DTA124ES
Q13	8-729-900-63	s TRANSISTOR DTA124ES
Q14	8-729-900-63	s TRANSISTOR DTA124ES
Q15	8-729-900-63	s TRANSISTOR DTA124ES
Q16	8-729-900-63	s TRANSISTOR DTA124ES
Q17	8-729-900-63	s TRANSISTOR DTA124ES
Q18	8-729-178-54	s TRANSISTOR 2SC2785-F
R1	1-247-700-11	s CARBON 100 5% 1/4W
S1	1-516-095-00	s SWITCH, LEVER SLIDE
S2	1-571-116-11	s SWITCH, LEVER SLIDE
S3	1-516-095-00	s SWITCH, LEVER SLIDE
S9	1-552-539-00	s SWITCH, TACTILE
S10	1-552-539-00	s SWITCH, TACTILE
S11	1-552-539-00	s SWITCH, TACTILE
S13	1-552-539-00	s SWITCH, TACTILE
S14	1-552-539-00	s SWITCH, TACTILE
S15	1-552-539-00	s SWITCH, TACTILE
S16	1-552-539-00	s SWITCH, TACTILE
2)S17	1-570-863-11	s SWITCH, SLIDE
X1	1-567-143-00	s RESONATOR, CERAMIC 6.00MHZ

NOTE: Please see the General Purpose Electrical List
of capacitors and resistors that are not listed in
the parts list.

LED-58 BOARD

Ref. No.
or Q'ty Part No. SP Description

1-626-316-11 o PRINTED CIRCUIT BOARD, LED-58

D301 8-719-945-82 s DIODE GL5HS42

PC-33 BOARD

Ref. No.
or Q'ty Part No. SP Description

1-622-604-11 o PRINTED CIRCUIT BOARD, PC-33

D1 8-719-800-81 s PHOTOINTERRUPTER TLP801A

PC-41 BOARD

Ref. No.
or Q'ty Part No. SP Description

1-623-267-11 o PRINTED CIRCUIT BOARD, PC-41

D1 8-719-800-81 s PHOTOINTERRUPTER TLP801A

PC-47 BOARD

Ref. No.
or Q'ty Part No. SP Description

1-628-786-11 o PRINTED CIRCUIT BOARD, PC-47

D1 8-719-800-81 s PHOTOINTERRUPTER TLP801A

PD-35 BOARD

Ref. No.
or Q'ty Part No. SP Description

1-622-596-11 o PRINTED CIRCUIT BOARD, PD-35

PTC-15 BOARD

Ref. No.
or Q'ty Part No. SP Description

1-622-597-11 o PRINTED CIRCUIT BOARD, PTC-15

D1 8-719-800-81 s PHOTOINTERRUPTER TLP801A

D2 8-719-800-81 s PHOTOINTERRUPTER TLP801A

PTC-20 BOARD

Ref. No.
or Q'ty Part No. SP Description

1-622-598-11 o PRINTED CIRCUIT BOARD, PTC-20

Q1 8-729-116-45 s PHOTOTRANSISTOR PH110

Q2 8-729-116-45 s PHOTOTRANSISTOR PH110

Q3 8-729-116-45 s PHOTOTRANSISTOR PH110

NOTE: Please see the General Purpose Electrical List
of capacitors and resistors that are not listed in
the parts list.

PTC-21 BOARD

Ref. No.

or Q'ty Part No. SP Description

1-622-599-11 o PRINTED CIRCUIT BOARD, PTC-21

D1 8-719-800-81 s PHOTOINTERRUPTER TLP801A
D2 8-719-800-81 s PHOTOINTERRUPTER TLP801A

PTC-31 BOARD

Ref. No.

or Q'ty Part No. SP Description

1-622-607-11 o PRINTED CIRCUIT BOARD, PTC-31

D1 8-719-941-47 s PHOTODIODE GP2S05

PTC-36 BOARD

Ref. No.

or Q'ty Part No. SP Description

1-622-601-11 o PRINTED CIRCUIT BOARD, PTC-36

D1 8-719-123-69 s DIODE SE310
D2 8-719-123-69 s DIODE SE310
D3 8-719-123-69 s DIODE SE310

R1 1-249-409-11 s CARBON 220 5% 1/4W
R2 1-249-409-11 s CARBON 220 5% 1/4W
R3 1-249-409-11 s CARBON 220 5% 1/4W

RM-40 BOARD

Ref. No.

or Q'ty Part No. SP Description

1-622-605-11 o PRINTED CIRCUIT BOARD, RM-40

C1 1-102-363-00 s CERAMIC 0.001uF 50V
C2 1-102-363-00 s CERAMIC 0.001uF 50V

CN3 1-562-708-11 o SOCKET, CONNECTOR 13P

SV-99 BOARD

Ref. No.

or Q'ty Part No. SP Description

1pc A-6715-405-A o MOUNTED CIRCUIT BOARD, SV-99

C23 1-126-233-11 s ELECT 22uF 20% 50V
C25 1-162-286-31 s CERAMIC 220PF 10% 50V
C28 1-131-347-00 s TANTALUM 1uF 10% 35V
C29 1-131-347-00 s TANTALUM 1uF 10% 35V
C37 1-162-282-31 s CERAMIC 100PF 10% 50V

C39 1-123-332-00 s ELECT 47uF 20% 25V
C40 1-162-290-31 s CERAMIC 470PF 10% 50V
C45 1-162-282-31 s CERAMIC 100PF 10% 50V
C46 1-162-282-31 s CERAMIC 100PF 10% 50V
C47 1-162-282-31 s CERAMIC 100PF 10% 50V

C48 1-162-282-31 s CERAMIC 100PF 10% 50V
C49 1-123-875-11 s ELECT 10uF 20% 50V
C56 1-161-494-00 s CERAMIC 0.022uF 25V
C57 1-162-206-31 s CERAMIC 20PF 5% 50V
C58 1-162-206-31 s CERAMIC 20PF 5% 50V

C65 1-162-282-31 s CERAMIC 100PF 10% 50V
C67 1-162-282-31 s CERAMIC 100PF 10% 50V
C71 1-162-290-31 s CERAMIC 470PF 10% 50V
C72 1-162-290-31 s CERAMIC 470PF 10% 50V
C73 1-162-290-31 s CERAMIC 470PF 10% 50V

C74 1-161-494-00 s CERAMIC 0.022uF 25V
C75 1-161-494-00 s CERAMIC 0.022uF 25V
C76 1-161-494-00 s CERAMIC 0.022uF 25V
C77 1-161-494-00 s CERAMIC 0.022uF 25V
C78 1-161-494-00 s CERAMIC 0.022uF 25V

C80 1-161-494-00 s CERAMIC 0.022uF 25V
C81 1-161-494-00 s CERAMIC 0.022uF 25V
C82 1-161-494-00 s CERAMIC 0.022uF 25V
C83 1-161-494-00 s CERAMIC 0.022uF 25V
C84 1-161-494-00 s CERAMIC 0.022uF 25V

C85 1-161-494-00 s CERAMIC 0.022uF 25V
C86 1-161-494-00 s CERAMIC 0.022uF 25V
C88 1-161-494-00 s CERAMIC 0.022uF 25V
C89 1-161-494-00 s CERAMIC 0.022uF 25V
C90 1-161-494-00 s CERAMIC 0.022uF 25V

C91 1-161-494-00 s CERAMIC 0.022uF 25V
C92 1-161-494-00 s CERAMIC 0.022uF 25V
C93 1-161-494-00 s CERAMIC 0.022uF 25V
C94 1-161-494-00 s CERAMIC 0.022uF 25V
C95 1-161-494-00 s CERAMIC 0.022uF 25V

C96 1-161-494-00 s CERAMIC 0.022uF 25V
C97 1-161-494-00 s CERAMIC 0.022uF 25V
C98 1-161-494-00 s CERAMIC 0.022uF 25V
C99 1-161-494-00 s CERAMIC 0.022uF 25V
C100 1-161-494-00 s CERAMIC 0.022uF 25V

C101 1-161-494-00 s CERAMIC 0.022uF 25V
C102 1-123-875-11 s ELECT 10uF 20% 50V
C108 1-161-494-00 s CERAMIC 0.022uF 25V
C109 1-161-494-00 s CERAMIC 0.022uF 25V
C110 1-161-494-00 s CERAMIC 0.022uF 25V

C111 1-161-494-00 s CERAMIC 0.022uF 25V
C113 1-161-494-00 s CERAMIC 0.022uF 25V
C114 1-161-494-00 s CERAMIC 0.022uF 25V
C115 1-161-494-00 s CERAMIC 0.022uF 25V
C150 1-162-282-31 s CERAMIC 100PF 10% 50V

NOTE: Please see the General Purpose Electrical List of capacitors and resistors that are not listed in the parts list.

(SV-99 BOARD)

Ref. No. or Q'ty	Part No.	SP Description
C151	1-162-282-31 s	CERAMIC 100PF 10% 50V
C152	1-123-875-11 s	ELECT 10uF 20% 50V
C154	1-162-290-31 s	CERAMIC 470PF 10% 50V
C156	1-162-290-31 s	CERAMIC 470PF 10% 50V
C157	1-123-332-00 s	ELECT 47uF 20% 25V
1)C163	1-102-123-00 s	CERAMIC 0.0033uF 10% 50V
2)C163	1-161-327-00 s	CERAMIC 3300PF 30% 16V
1)C164	1-102-123-00 s	CERAMIC 0.0033uF 10% 50V
2)C164	1-161-327-00 s	CERAMIC 3300PF 30% 16V
CN1	1-564-005-00 o	CONNECTOR, 6P, MALE
CN2	1-564-005-00 o	CONNECTOR, 6P, MALE
CN3	1-564-003-00 o	CONNECTOR, 4P, MALE
CN5	1-564-002-00 o	CONNECTOR, 3P, MALE
CN6	1-564-004-00 o	CONNECTOR, 5P, MALE
CN7	1-564-004-00 o	CONNECTOR, 5P, MALE
CN8	1-564-003-00 o	CONNECTOR, 4P, MALE
CN9	1-564-007-00 o	CONNECTOR, 8P, MALE
CN10	1-564-005-00 o	CONNECTOR, 6P, MALE
CN11	1-564-009-00 o	CONNECTOR, 10P, MALE
CN12	1-564-002-00 o	CONNECTOR, 3P, MALE
CN13	1-564-005-00 o	CONNECTOR, 6P, MALE
CN14	1-564-002-00 o	CONNECTOR, 3P, MALE
CN15	1-564-005-00 o	CONNECTOR, 6P, MALE
CN16	1-564-009-00 o	CONNECTOR, 10P, MALE
D10	8-719-109-93 s	DIODE RD6.2ESB2
D13	8-719-911-19 s	DIODE 1SS119
D14	8-719-911-19 s	DIODE 1SS119
D15	8-719-911-19 s	DIODE 1SS119
D16	8-719-911-19 s	DIODE 1SS119
D17	8-719-911-19 s	DIODE 1SS119
D18	8-719-911-19 s	DIODE 1SS119
D21	8-719-911-19 s	DIODE 1SS119
D22	8-719-911-19 s	DIODE 1SS119
D26	8-719-101-50 s	DIODE RD5.1EL2
D27	8-719-101-50 s	DIODE RD5.1EL2
D28	8-719-110-13 s	DIODE RD9.1ESB2
D29	8-719-911-19 s	DIODE 1SS119
D30	8-719-911-19 s	DIODE 1SS119
D31	8-719-911-19 s	DIODE 1SS119
D32	8-719-911-19 s	DIODE 1SS119
D33	8-719-911-19 s	DIODE 1SS119
D34	8-719-911-19 s	DIODE 1SS119
IC6	8-759-240-71 s	IC TC4071BP
IC7	8-759-705-58 s	IC NJM4558D-D
IC8	8-759-729-03 s	IC NJM2903D
IC9	8-759-205-76 s	IC TC504013BP
IC10	8-759-135-80 s	IC UPC358C
IC13	8-759-132-40 s	IC UPC324C
IC14	8-759-132-40 s	IC UPC324C
IC15	8-759-729-03 s	IC NJM2903D
IC16	8-759-729-03 s	IC NJM2903D
IC17	8-759-240-71 s	IC TC4071BP

(SV-99 BOARD)

Ref. No. or Q'ty	Part No.	SP Description
IC18	8-759-207-73 s	IC TC4030BPHB
IC19	8-759-205-76 s	IC TC504013BP
IC20	8-752-321-00 s	IC CXK5816PN-12L
1)IC21	8-759-746-19 s	IC MBN27128-25
3)IC21	8-759-741-03 s	IC BVW-22 SV-99 V1.6
4)IC21	8-759-742-82 s	IC BVW-22SV-99 V1.71
18)IC21	8-759-734-82 s	IC BVW-22 SV-99 V1.71
IC22	8-759-203-35 s	IC TC74HC373P
IC23	8-759-113-03 s	IC UPD78310CW
IC24	8-759-202-89 s	IC TC74HC139P
IC25	8-759-135-80 s	IC UPC358C
1)IC26	8-752-324-40 s	IC CXK1011P
2)IC26	8-752-330-59 s	IC CXK1011P
IC27	8-759-202-12 s	IC TC74HC02P
IC29	8-759-132-40 s	IC UPC324C
IC30	8-759-132-40 s	IC UPC324C
IC31	8-759-135-80 s	IC UPC358C
IC32	8-759-203-35 s	IC TC74HC373P
IC33	8-759-947-53 s	IC S-8054ALR
IC34	8-759-201-47 s	IC TA7357AP
IC35	8-759-135-80 s	IC UPC358C
3)Q1	8-729-820-06 s	TRANSISTOR 2SD1685-F
4)Q1	8-729-820-07 s	TRANSISTOR 2SD1685-G
3)Q2	8-729-820-06 s	TRANSISTOR 2SD1685-F
4)Q2	8-729-820-07 s	TRANSISTOR 2SD1685-G
Q3	8-729-201-04 s	TRANSISTOR 2SC2878-A
Q4	8-729-900-89 s	TRANSISTOR DTC144ES
Q5	8-729-900-89 s	TRANSISTOR DTC144ES
Q6	8-729-900-89 s	TRANSISTOR DTC144ES
Q7	8-729-900-89 s	TRANSISTOR DTC144ES
Q8	8-729-900-89 s	TRANSISTOR DTC144ES
R61	1-247-876-11 s	CARBON 75K 5% 1/4W
R62	1-249-747-11 s	CARBON 1.5M 5% 1/4W
R64	1-249-747-11 s	CARBON 1.5M 5% 1/4W
R67	1-247-883-00 s	CARBON 150K 5% 1/4W
R100	1-247-846-11 s	CARBON 4.3K 5% 1/4W
R102	1-247-885-00 s	CARBON 180K 5% 1/4W
R108	1-247-885-00 s	CARBON 180K 5% 1/4W
R113	1-247-895-00 s	CARBON 470K 5% 1/4W
R114	1-247-887-00 s	CARBON 220K 5% 1/4W
R116	1-247-887-00 s	CARBON 220K 5% 1/4W
R121	1-247-895-00 s	CARBON 470K 5% 1/4W
R122	1-247-887-00 s	CARBON 220K 5% 1/4W
R124	1-247-887-00 s	CARBON 220K 5% 1/4W
R129	1-247-895-00 s	CARBON 470K 5% 1/4W
R130	1-247-887-00 s	CARBON 220K 5% 1/4W
R132	1-247-887-00 s	CARBON 220K 5% 1/4W
R137	1-247-895-00 s	CARBON 470K 5% 1/4W
R138	1-247-887-00 s	CARBON 220K 5% 1/4W
R140	1-247-887-00 s	CARBON 220K 5% 1/4W
R168	1-247-903-00 s	CARBON 1M 5% 1/4W
R190	1-247-895-00 s	CARBON 470K 5% 1/4W
R191	1-247-895-00 s	CARBON 470K 5% 1/4W
R192	1-247-895-00 s	CARBON 470K 5% 1/4W
R194	1-247-903-00 s	CARBON 1M 5% 1/4W
R198	1-247-895-00 s	CARBON 470K 5% 1/4W

NOTE: Please see the General Purpose Electrical List
of capacitors and resistors that are not listed in
the parts list.

(SV-99 BOARD)

Ref. No.

or Q'ty Part No. SP Description

R199	1-247-895-00	s CARBON 470K 5% 1/4W
R200	1-247-895-00	s CARBON 470K 5% 1/4W
R201	1-247-903-00	s CARBON 1M 5% 1/4W
R205	1-247-838-00	s CARBON 2K 5% 1/4W
R208	1-247-838-00	s CARBON 2K 5% 1/4W
R310	1-247-895-00	s CARBON 470K 5% 1/4W
R311	1-247-883-00	s CARBON 150K 5% 1/4W
R316	1-247-887-00	s CARBON 220K 5% 1/4W
RB1	1-231-410-00	s RESISTOR BLOCK 10Kx8
RB2	1-231-410-00	s RESISTOR BLOCK 10Kx8
RV1	1-230-504-11	s RES, ADJ, METAL 220
RV2	1-230-504-11	s RES, ADJ, METAL 220
RV3	1-228-996-00	s RES, ADJ, METAL 47K
S1	1-552-539-00	s SWITCH, TACTILE
S2	1-552-539-00	s SWITCH, TACTILE
S3	1-570-857-11	s SWITCH, SLIDE
S4	1-570-857-11	s SWITCH, SLIDE
X1	1-567-865-11	s CRYSTAL, 12.00MHz

SV-117A BOARD

Ref. No.

or Q'ty Part No. SP Description

1pc	A-6715-419-A	o MOUNTED CIRCUIT BOARD, SV-117A
C1	1-161-327-00	s CERAMIC 0.0033MF 30% 50V
C2	1-131-343-00	s TANTALUM 0.22uF 10% 35V
C3	1-131-386-00	s TANTALUM 33uF 10% 6.3V
C4	1-131-386-00	s TANTALUM 33uF 10% 6.3V
C7	1-131-348-00	s TANTALUM 1.5uF 10% 35V
C8	1-131-348-00	s TANTALUM 1.5uF 10% 35V
C9	1-131-386-00	s TANTALUM 33uF 10% 6.3V
C10	1-131-386-00	s TANTALUM 33uF 10% 6.3V
C11	1-131-347-00	s TANTALUM 1uF 10% 35V
C14	1-131-368-00	s TANTALUM 3.3uF 10% 16V
C15	1-131-368-00	s TANTALUM 3.3uF 10% 16V
C21	1-131-372-00	s TANTALUM 15uF 10% 16V
C22	1-131-381-00	s TANTALUM 47uF 10% 10V
C23	1-131-341-00	s TANTALUM 0.1uF 10% 35V
C25	1-131-347-00	s TANTALUM 1uF 10% 35V
2)C26	1-124-445-00	s ELECT 100 20% 16V
C28	1-161-494-00	s CERAMIC 0.022uF 25V
C29	1-161-494-00	s CERAMIC 0.022uF 25V
C30	1-161-494-00	s CERAMIC 0.022uF 25V
C31	1-161-494-00	s CERAMIC 0.022uF 25V
C32	1-161-494-00	s CERAMIC 0.022uF 25V
C33	1-161-494-00	s CERAMIC 0.022uF 25V
C34	1-161-494-00	s CERAMIC 0.022uF 25V
C35	1-161-494-00	s CERAMIC 0.022uF 25V
C36	1-161-494-00	s CERAMIC 0.022uF 25V
C37	1-161-494-00	s CERAMIC 0.022uF 25V
CN1	1-506-489-11	o CONNECTOR, 10P, MALE
D1	8-719-911-19	s DIODE 1SS119
D2	8-719-911-19	s DIODE 1SS119
D3	8-719-911-19	s DIODE 1SS119
D4	8-719-911-19	s DIODE 1SS119
D5	8-719-911-19	s DIODE 1SS119
IC1	8-759-202-24	s IC TC74HC86P
IC2	8-759-345-38	s IC HD14538BP
IC3	8-759-345-38	s IC HD14538BP
IC4	8-759-340-13	s IC HD14013BP
IC5	8-759-340-46	s IC HD14046BP
IC6	8-759-208-10	s IC TC4053BPHB
IC7	8-759-132-40	s IC UPC324C
IC8	8-759-208-10	s IC TC4053BPHB
IC9	8-759-132-40	s IC UPC324C
IC10	8-759-132-40	s IC UPC324C
L1	1-410-071-11	s INDUCTOR 10mH
R2	1-247-883-00	s CARBON 150K 5% 1/4W
R7	1-247-887-00	s CARBON 220K 5% 1/4W
R8	1-247-887-00	s CARBON 220K 5% 1/4W
R10	1-247-895-00	s CARBON 470K 5% 1/4W
R11	1-247-887-00	s CARBON 220K 5% 1/4W
R12	1-247-887-00	s CARBON 220K 5% 1/4W
R16	1-247-895-00	s CARBON 470K 5% 1/4W
R18	1-247-887-00	s CARBON 220K 5% 1/4W
R19	1-247-887-00	s CARBON 220K 5% 1/4W
R20	1-247-887-00	s CARBON 220K 5% 1/4W

NOTE: Please see the General Purpose Electrical List of capacitors and resistors that are not listed in the parts list.

(SV-117A BOARD)

Ref. No. or Q'ty	Part No.	SP Description
R23	1-247-895-00	s CARBON 470K 5% 1/4W
R24	1-247-887-00	s CARBON 220K 5% 1/4W
R25	1-247-887-00	s CARBON 220K 5% 1/4W
R36	1-247-887-00	s CARBON 220K 5% 1/4W

SVD-2 BOARD

Ref. No. or Q'ty	Part No.	SP Description
1pc	1-626-314-11	o PRINTED CIRCUIT BOARD, SVD-2
C5	1-126-103-11	s ELECT 470uF 20% 16V
C6	1-101-006-00	s CERAMIC 0.047uF 50V
C7	1-101-006-00	s CERAMIC 0.047uF 50V
CN1	1-508-949-00	o CONNECTOR, 12P, MALE
CN2	1-564-005-00	o CONNECTOR, 6P, MALE
CN3	1-564-002-00	o CONNECTOR, 3P, MALE
CN4	1-564-007-00	o CONNECTOR, 8P, MALE
CN5	1-564-005-00	o CONNECTOR, 6P, MALE
CN6	1-564-007-00	o CONNECTOR, 8P, MALE
CN7	1-564-002-00	o CONNECTOR, 3P, MALE
CN8	1-564-002-00	o CONNECTOR, 3P, MALE
D1	8-719-911-19	s DIODE 1SS119
IC1	8-759-108-77	s IC CX877
L1	1-459-155-00	s COIL 45uH
L2	1-459-155-00	s COIL 45uH
Q8	8-729-201-04	s TRANSISTOR 2SC2878-A
Q10	8-729-201-04	s TRANSISTOR 2SC2878-A
Q11	8-729-820-03	s TRANSISTOR 2SB1140-S
Q12	8-729-820-03	s TRANSISTOR 2SB1140-S
R6	△1-216-389-11	s METAL 1 5% 3W
R7	△1-216-389-11	s METAL 1 5% 3W

NOTE: Please see the General Purpose Electrical List
of capacitors and resistors that are not listed in
the parts list.

SW-274 BOARD

Ref. No.

or Q'ty Part No. SP Description

D201 8-719-911-19 s DIODE 1SS119
D202 8-719-911-19 s DIODE 1SS119

S201 1-552-539-00 s SWITCH, TACTILE
S202 1-552-539-00 s SWITCH, TACTILE

SY-121A BOARD

Ref. No.

or Q'ty Part No. SP Description

1pc A-6717-503-A o MOUNTED CIRCUIT BOARD, SY-121A

C2 1-162-286-31 s CERAMIC 220PF 10% 50V
C3 1-129-794-00 s FILM 0.0033uF 5% 100V
C6 1-161-379-00 s CERAMIC 0.01uF 20% 25V
C7 1-124-499-11 s ELECT, NONPOLAR 1uF 20% 50V
C11 1-101-006-00 s CERAMIC 0.047uF 50V

C14 1-101-006-00 s CERAMIC 0.047uF 50V
C15 1-129-794-00 s FILM 0.0033uF 5% 100V
C17 1-161-379-00 s CERAMIC 0.01uF 20% 25V
C32 1-161-379-00 s CERAMIC 0.01uF 20% 25V
C33 1-162-205-31 s CERAMIC 18PF 5% 50V

C34 1-126-176-11 s ELECT 220uF 20% 10V
C36 1-161-375-00 s CERAMIC 0.0022uF 20% 50V
C37 1-161-494-00 s CERAMIC 0.022uF 25V
C38 1-161-379-00 s CERAMIC 0.01uF 20% 25V
C41 1-101-006-00 s CERAMIC 0.047uF 50V

C42 1-162-201-31 s CERAMIC 12PF 5% 50V
C43 1-162-201-31 s CERAMIC 12PF 5% 50V
C44 1-161-494-00 s CERAMIC 0.022uF 25V
C46 1-101-006-00 s CERAMIC 0.047uF 50V
C47 1-101-006-00 s CERAMIC 0.047uF 50V

C48 1-101-006-00 s CERAMIC 0.047uF 50V
C49 1-101-006-00 s CERAMIC 0.047uF 50V
C50 1-101-006-00 s CERAMIC 0.047uF 50V
C51 1-126-176-11 s ELECT 220uF 20% 10V
C53 1-161-494-00 s CERAMIC 0.022uF 25V

C54 1-161-494-00 s CERAMIC 0.022uF 25V
C55 1-101-006-00 s CERAMIC 0.047uF 50V
C101 1-161-494-00 s CERAMIC 0.022uF 25V
C105 1-162-292-31 s CERAMIC 680PF 10% 50V
C108 1-162-288-31 s CERAMIC 330PF 10% 50V

C109 1-162-288-31 s CERAMIC 330PF 10% 50V
C114 1-161-375-00 s CERAMIC 0.0022uF 20% 50V
C117 1-124-927-11 s ELECT 4.7uF 20% 100V
C118 1-162-282-31 s CERAMIC 100PF 10% 50V
C120 1-162-207-31 s CERAMIC 22PF 5% 50V

C123 1-162-282-31 s CERAMIC 100PF 10% 50V
C126 1-161-494-00 s CERAMIC 0.022uF 25V
C127 1-162-215-31 s CERAMIC 47PF 5% 50V
C128 1-162-286-31 s CERAMIC 220PF 10% 50V
C206 1-162-282-31 s CERAMIC 100PF 10% 50V

C210 1-162-294-31 s CERAMIC 0.001uF 10% 50V
C213 1-162-282-31 s CERAMIC 100PF 10% 50V
C216 1-162-282-31 s CERAMIC 100PF 10% 50V
C217 1-162-282-31 s CERAMIC 100PF 10% 50V
C218 1-162-282-31 s CERAMIC 100PF 10% 50V

C219 1-101-006-00 s CERAMIC 0.047uF 50V
C221 1-101-006-00 s CERAMIC 0.047uF 50V
C223 1-101-006-00 s CERAMIC 0.047uF 50V
C225 1-101-006-00 s CERAMIC 0.047uF 50V
C227 1-162-282-31 s CERAMIC 100PF 10% 50V

CN1 1-506-470-11 o CONNECTOR, 5P, MALE
CN2 1-506-471-11 o CONNECTOR, 6P, MALE
CN3 1-506-470-11 o CONNECTOR, 5P, MALE
CN4 1-506-467-11 o CONNECTOR, 2P, MALE
CN5 1-506-469-11 o CONNECTOR, 4P, MALE

NOTE: Please see the General Purpose Electrical List of capacitors and resistors that are not listed in the parts list.

(SY-121A BOARD)

Ref. No. or Q'ty	Part No.	SP Description
CN6	1-506-477-11	o CONNECTOR, 12P, MALE
CN7	1-506-469-11	o CONNECTOR, 4P, MALE
CN8	1-506-475-11	o CONNECTOR, 10P, MALE
CN9	1-506-468-11	o CONNECTOR, 3P, MALE
CN10	1-506-469-11	o CONNECTOR, 4P, MALE
CN11	1-506-477-11	o CONNECTOR, 12P, MALE
CN12	1-506-475-11	o CONNECTOR, 10P, MALE
CN13	1-506-468-11	o CONNECTOR, 3P, MALE
CN14	1-506-477-11	o CONNECTOR, 12P, MALE
CN15	1-506-477-11	o CONNECTOR, 12P, MALE
CN16	1-506-477-11	o CONNECTOR, 12P, MALE
CN17	1-506-468-11	o CONNECTOR, 3P, MALE
CN18	1-506-473-11	o CONNECTOR, 8P, MALE
CN19	1-506-475-11	o CONNECTOR, 10P, MALE
CN20	1-506-468-11	o CONNECTOR, 3P, MALE
CN21	1-506-469-11	o CONNECTOR, 4P, MALE
CN22	1-506-471-11	o CONNECTOR, 6P, MALE
CN23	1-506-468-11	o CONNECTOR, 3P, MALE
CV1	1-141-227-00	s CAP, TRIMMER 20PF
D1	8-719-200-02	s DIODE 10E2
D2	8-719-200-02	s DIODE 10E2
D3	8-719-200-02	s DIODE 10E2
D4	8-719-200-02	s DIODE 10E2
D31	8-719-911-19	s DIODE 1SS119
D32	8-719-200-02	s DIODE 10E2
D33	8-719-911-19	s DIODE 1SS119
D34	8-719-815-87	s DIODE 1S1587
D101	8-719-911-19	s DIODE 1SS119
D102	8-719-911-19	s DIODE 1SS119
D103	8-719-911-19	s DIODE 1SS119
D104	8-719-911-19	s DIODE 1SS119
D201	8-719-911-19	s DIODE 1SS119
D202	8-719-911-19	s DIODE 1SS119
D203	8-719-911-19	s DIODE 1SS119
D204	8-719-911-19	s DIODE 1SS119
D205	8-719-911-19	s DIODE 1SS119
D207	8-719-911-19	s DIODE 1SS119
D208	8-719-911-19	s DIODE 1SS119
D209	8-719-911-19	s DIODE 1SS119
D210	8-719-911-19	s DIODE 1SS119
D211	8-719-911-19	s DIODE 1SS119
D301	8-719-911-19	s DIODE 1SS119
D302	8-719-911-19	s DIODE 1SS119
IC1	8-752-805-87	s IC CXP80116-009Q
IC2	8-759-972-64	s IC MB88323A-K2
IC3	8-759-202-92	s IC TC74HC151P
IC4	8-759-202-92	s IC TC74HC151P
IC5	8-759-800-72	s IC LA7205
IC6	8-759-708-05	s IC NJM78L05A
IC7	8-743-430-00	s IC BX343
IC8	8-759-205-56	s IC TA7267P
IC9	8-759-205-56	s IC TA7267P
IC10	8-759-202-37	s IC TC74HC4050P
IC11	8-759-600-34	s IC M54532P
IC12	8-759-645-23	s IC M54523P

(SY-121A BOARD)

Ref. No. or Q'ty	Part No.	SP Description
IC13	8-759-345-38	s IC HD14538BP
IC14	8-759-202-11	s IC TC74HC00P
IC15	8-759-240-69	s IC TC4069UBP
IC101	8-759-912-64	s IC PA0009
IC102	8-759-705-62	s IC NJM4562D-D
IC103	8-759-202-24	s IC TC74HC86P
IC201	8-759-729-03	s IC NJM2903D
IC202	8-759-729-03	s IC NJM2903D
IC203	8-759-729-03	s IC NJM2903D
IC204	8-759-240-71	s IC TC4071BP
IC205	8-759-207-73	s IC TC4030BPHB
IC206	8-759-205-76	s IC TC504013BP
L1	1-410-514-11	s INDUCTOR 27uH
L2	1-410-521-11	s INDUCTOR 100uH
L101	1-410-522-11	s INDUCTOR 120uH
Q1	8-729-900-89	s TRANSISTOR DTC144ES
Q2	8-729-900-89	s TRANSISTOR DTC144ES
Q3	8-729-900-89	s TRANSISTOR DTC144ES
Q4	8-729-900-89	s TRANSISTOR DTC144ES
Q5	8-729-117-54	s TRANSISTOR 2SA1175-F
Q6	8-729-117-54	s TRANSISTOR 2SA1175-F
Q7	8-729-117-54	s TRANSISTOR 2SA1175-F
Q8	8-729-201-05	s TRANSISTOR 2SC2878-B
Q11	8-729-900-89	s TRANSISTOR DTC144ES
Q101	8-729-117-54	s TRANSISTOR 2SA1175-F
Q102	8-729-900-89	s TRANSISTOR DTC144ES
Q103	8-729-600-27	s TRANSISTOR 2SC834-SP7
Q104	8-729-117-54	s TRANSISTOR 2SA1175-F
7)Q105	8-729-900-89	s TRANSISTOR DTC144ES
8)Q105	8-729-900-36	s TRANSISTOR DTC124ES
Q106	8-729-900-89	s TRANSISTOR DTC144ES
Q107	8-729-900-65	s TRANSISTOR DTA144ES
R103	1-247-899-11	s CARBON 680K 5% 1/4W
R115	1-247-901-11	s CARBON 820K 5% 1/4W
R126	1-247-881-00	s CARBON 120K 5% 1/4W
R204	1-247-887-00	s CARBON 220K 5% 1/4W
R212	1-247-887-00	s CARBON 220K 5% 1/4W
R220	1-247-887-00	s CARBON 220K 5% 1/4W
R228	1-247-895-00	s CARBON 470K 5% 1/4W
R235	1-247-887-00	s CARBON 220K 5% 1/4W
R237	1-247-903-00	s CARBON 1M 5% 1/4W
R243	1-247-887-00	s CARBON 220K 5% 1/4W
R245	1-247-903-00	s CARBON 1M 5% 1/4W
RB1	1-231-410-00	s RESISTOR BLOCK 10Kx8
RB2	1-231-410-00	s RESISTOR BLOCK 10Kx8
RV1	1-230-496-11	s RES, ADJ, METAL 10K
RV2	1-228-994-00	s RES, ADJ, METAL 10K
RV3	1-228-993-00	s RES, ADJ, METAL 4.7K
S1	1-570-857-11	s SWITCH, SLIDE
S2	1-570-857-11	s SWITCH, SLIDE
S3	1-570-857-11	s SWITCH, SLIDE
X1	1-577-076-11	s CRYSTAL, 16.000MHz

NOTE: Please see the General Purpose Electrical List of capacitors and resistors that are not listed in the parts list.

TC-49A BOARD

Ref. No.

or Q'ty Part No. SP Description

1pc A-6717-504-A o MOUNTED CIRCUIT BOARD, TC-49A
2pcs 3-657-153-00 o HINGE
2pcs 3-646-090-00 s RIVET, NYLON

BT1 1-528-229-11 o BATTERY, LITHIUM CR-2450

C1 1-162-207-31 s CERAMIC 22PF 5% 50V
C2 1-162-207-31 s CERAMIC 22PF 5% 50V
C3 1-161-494-00 s CERAMIC 0.022uF 25V
C4 1-126-176-11 s ELECT 220uF 20% 10V
C5 1-162-207-31 s CERAMIC 22PF 5% 50V

C6 1-162-207-31 s CERAMIC 22PF 5% 50V
C7 1-161-374-11 s CERAMIC 0.0015uF 20% 50V
C8 1-126-094-11 s ELECT 4.7uF 20% 35V
C9 1-124-465-00 s ELECT 0.47uF 20% 50V
C10 1-162-210-31 s CERAMIC 30PF 5% 50V

C11 1-162-210-31 s CERAMIC 30PF 5% 50V
C12 1-161-494-00 s CERAMIC 0.022uF 25V
C14 1-161-494-00 s CERAMIC 0.022uF 25V
C15 1-126-176-11 s ELECT 220uF 20% 10V
C16 1-124-261-00 s ELECT 10uF 20% 50V

C17 1-126-176-11 s ELECT 220uF 20% 10V
C18 1-161-494-00 s CERAMIC 0.022uF 25V
C19 1-161-494-00 s CERAMIC 0.022uF 25V
C20 1-124-589-11 s ELECT 47uF 20% 16V
C23 1-126-094-11 s ELECT 4.7uF 20% 35V

C25 1-162-199-31 s CERAMIC 10PF 5% 50V
C26 1-162-282-31 s CERAMIC 100PF 10% 50V
C27 1-124-589-11 s ELECT 47uF 20% 16V
C28 1-161-494-00 s CERAMIC 0.022uF 25V
C29 1-161-379-00 s CERAMIC 0.01uF 20% 25V

C30 1-161-494-00 s CERAMIC 0.022uF 25V
C31 1-161-379-00 s CERAMIC 0.01uF 20% 25V

CN1 1-506-477-11 o CONNECTOR, 12P, MALE
CN2 1-506-489-11 o CONNECTOR, 10P, MALE
CN3 1-564-013-00 o CONNECTOR, 3P, MALE
CN4 1-506-489-11 o CONNECTOR, 10P, MALE
CN5 1-506-489-11 o CONNECTOR, 10P, MALE

1)COR1 1-564-947-11 s CONNECTOR, 2P, MALE
2)COR1 1-565-240-11 s HEADDER, PIN, 2P

D1 8-719-200-02 s DIODE 10E2
D2 8-719-911-19 s DIODE 1SS119
D3 8-719-120-65 s DIODE RD5.6ESL2
D4 8-719-200-02 s DIODE 10E2
D5 8-719-911-19 s DIODE 1SS119

9)IC1 8-759-630-98 s IC M50747-123SP
10)IC1 8-759-633-52 s IC M50747-123SP
IC2 8-759-944-79 s IC CXD1132Q
IC3 8-759-141-20 s IC CXD1133Q-321
IC4 8-759-645-16 s IC M54516P

IC5 8-759-645-16 s IC M54516P
IC6 8-759-240-69 s IC TC4069UBP
IC7 8-759-340-46 s IC HD14046BP
IC8 8-759-947-53 s IC S-8054ALR

L1 1-459-155-00 s COIL 45uH

Q2 8-729-117-54 s TRANSISTOR 2SA1175-F

NOTE: Please see the General Purpose Electrical List
of capacitors and resistors that are not listed in
the parts list.

(TC-49A BOARD)

Ref. No.

or Q'ty Part No. SP Description

Q3 8-729-117-54 s TRANSISTOR 2SA1175-F
Q4 8-729-117-54 s TRANSISTOR 2SA1175-F
Q5 8-729-117-54 s TRANSISTOR 2SA1175-F
Q6 8-729-117-54 s TRANSISTOR 2SA1175-F
Q7 8-729-117-54 s TRANSISTOR 2SA1175-F

Q8 8-729-117-54 s TRANSISTOR 2SA1175-F
3)Q9 8-729-820-06 s TRANSISTOR 2SD1685-F
4)Q9 8-729-820-07 s TRANSISTOR 2SD1685-G
Q10 8-729-900-89 s TRANSISTOR DTC144ES

R3 1-247-903-00 s CARBON 1M 5% 1/4W
R7 1-247-895-00 s CARBON 470K 5% 1/4W
R11 1-247-903-00 s CARBON 1M 5% 1/4W

X1 1-567-132-00 s RESONATOR, CERAMIC 8.00MHz
X2 1-567-867-11 s CRYSTAL, 14.500MHz
X3 1-567-865-11 s CRYSTAL, 12.00MHz

 TR-18 BOARD

Ref. No.

or Q'ty Part No. SP Description

1-611-279-13 o PRINTED CIRCUIT BOARD, TR-18
 8-749-020-80 s DME DM-208

 UR-14E

Ref. No.

or Q'ty Part No. SP Description

△1-413-249-12 s SWITCHING REGULATOR, UR-14E

C101 △1-161-742-00 s CERAMIC 2200PF 20% 400V
 C102 △1-161-742-00 s CERAMIC 2200PF 20% 400V
 C103 △1-161-742-00 s CERAMIC 2200PF 20% 400V
 C104 △1-161-742-00 s CERAMIC 2200PF 20% 400V
 C105 △1-136-185-00 s FILM 0.22uF 20% 250V

C106 △1-136-185-00 s FILM 0.22uF 20% 250V
 C107 △1-161-742-00 s CERAMIC 2200PF 20% 400V
 C108 △1-161-742-00 s CERAMIC 2200PF 20% 400V
 C109 1-124-961-00 s ELECT 220 20% 200V
 C110 1-124-023-00 s ELECT 4.7 20% 350V

C111 1-124-023-00 s ELECT 4.7 20% 350V
 C112 1-124-549-00 s ELECT 100 20% 10V
 C113 1-124-961-00 s ELECT 220 20% 200V
 C114 1-124-549-00 s ELECT 100 20% 10V
 C201 1-106-351-00 s MYLAR 0.0022 5% 200V

C202 1-106-351-00 s MYLAR 0.0022 5% 200V
 C203 1-161-825-11 s CERAMIC 220PF 10% 500V
 C204 1-161-825-11 s CERAMIC 220PF 10% 500V
 C205 1-161-825-11 s CERAMIC 220PF 10% 500V
 C206 1-161-825-11 s CERAMIC 220PF 10% 500V

C207 1-123-357-00 s ELECT 22 20% 50V
 C209 1-106-351-00 s MYLAR 0.0022 5% 200V
 C210 1-136-153-00 s MYLAR 0.01 5% 50V
 C211 1-106-351-00 s MYLAR 0.0022 5% 200V
 C212 1-124-556-00 s ELECT 2200 20% 16V

C213 1-124-556-00 s ELECT 2200 20% 16V
 C214 1-124-556-00 s ELECT 2200 20% 16V
 C215 1-124-556-00 s ELECT 2200 20% 16V
 C216 1-123-326-00 s ELECT 3300 20% 16V
 C217 1-123-332-00 s ELECT 47 20% 50V

C651 1-124-445-00 s ELECT 100 20% 16V
 C652 1-130-591-11 s MYLAR 3300PF 2% 100V
 C653 1-136-141-00 s MYLAR 1000PF 10% 50V
 C654 1-136-165-00 s MYLAR 0.1 5% 50V
 C655 1-123-318-00 s ELECT 33 16V

CN101 △1-560-436-00 o RECEPTACLE, 3P

△1-561-218-11 o HOUSING, 3P
 △1-561-254-11 o CONTACT

CN201 1-560-438-00 o RECEPTACLE, 5P

1-561-424-11 o HOUSING, 5P
 1-561-432-11 o CONTACT

D101 8-719-300-00 s LB-156
 D201 8-719-908-00 s ESAC33-02CS
 D202 8-719-908-00 s ESAC33-02CS
 D203 8-719-900-93 s V09C
 D204 8-719-900-93 s V09C

D205 8-719-815-55 s 1S1555
 D206 8-719-100-61 s RD11EB2
 D208 8-719-101-67 s RD7.5EL2
 D209 8-719-100-30 s RD5.1EB2
 D210 8-719-100-30 s RD5.1EB2

D651 8-719-200-02 s 10E-2

NOTE: Please see the General Purpose Electrical List
 of capacitors and resistors that are not listed in
 the parts list.

(UR-14E)

Ref. No.
or Q'ty Part No. SP Description

D652 8-719-100-70 s RD15EB1
D653 8-719-815-55 s 1S1555

FB101 1-543-060-00 s CORE
FB102 1-543-060-00 s CORE
FB201 1-543-060-00 s CORE
FB202 1-543-060-00 s CORE
FB203 1-543-060-00 s CORE

FB204 1-543-060-00 s CORE
FB205 1-543-060-00 s CORE
FB206 1-543-060-00 s CORE
FB207 1-543-060-00 s CORE
FB208 1-543-060-00 s CORE

IC651 8-759-937-00 s MB3759

L101 Δ 1-421-848-11 s LINE FILTER
L201 1-421-849-11 s CHOKO, 2.4 mH
L203 1-408-316-00 s CHOKO
L204 1-421-850-11 s CHOKO, 12
L205 1-421-329-00 s CHOKO

Q101 8-729-901-72 s 2SC3317
Q102 8-729-901-72 s 2SC3317
Q103 8-729-100-13 s 2SC2001
Q104 8-729-100-13 s 2SC2001
Q201 8-729-606-34 s 2SC2603-G

Q202 8-729-117-54 s 2SA1175-F

R101 1-214-947-00 s METAL 2.7M 1% 1/2W
R102 Δ 1-205-636-11 s CEMENT 3.3 5% 5W
R103 1-246-529-00 s CARBON 220k 5% 1/4W
R104 1-246-529-00 s CARBON 220k 5% 1/4W
R105 Δ 1-212-934-00 s METAL 1 5% 1/2W

R106 1-247-700-11 s NF CARBON 100 5% 1/4W
R107 1-246-529-00 s CARBON 220k 5% 1/4W
R108 1-246-529-00 s CARBON 220k 5% 1/4W
R109 Δ 1-212-934-00 s METAL 1 5% 1/2W
R110 1-247-700-11 s NF CARBON 100 5% 1/4W

R201 Δ 1-206-475-00 s METAL 33 5% 2W
R202 1-535-369-00 s SHUNT 0.02 2W
R203 Δ 1-213-151-00 s METAL 4.7k 5% 5W
R204 1-247-713-11 s NF CARBON 1k 5% 1/4W
R205 1-247-719-11 s NF CARBON 3.3k 5% 1/4W

R206 1-249-455-11 s NF CARBON 4.7k 5% 1/4W
R207 1-247-717-11 s NF CARBON 2.2k 5% 1/4W
R208 1-247-123-00 s NF CARBON 470 5% 1/4W
R209 1-247-704-11 s NF CARBON 220 5% 1/4W
R212 1-247-857-00 s NF CARBON 220 5% 1/2W

R651 1-249-425-11 s NF CARBON 4.7k 5% 1/6W

RV651 1-228-644-00 s VAR. METAL 1k 0.3W

T101 Δ 1-448-423-11 s CONVERTER
T102 Δ 1-437-126-00 s DRIVE

VR-69 BOARD

Ref. No.
or Q'ty Part No. SP Description

1-626-308-11 o PRINTED CIRCUIT BOARD, VR-69

RV2 1-237-719-11 s RES, VAR, CARBON 100K

NOTE: Please see the General Purpose Electrical List
of capacitors and resistors that are not listed in
the parts list.

17-4. PACKING MATERIAL AND ACCESSORIES (SUPPLIED)

FRAME

Ref. No.

or Q'ty Part No. SP Description

A-6050-575-A s BRUSH ASS'Y
A-6050-576-A s RING ASS'Y, SLIP
A-6050-582-A s HEAD DRUM ASS'Y, DBH-12A-R
A-6762-377-A s DRUM ASS'Y, UPPER, DBR-12-R
△1-413-249-12 o SWITCHING REGULATOR, UR-14E

1-559-265-11 o FLAT CABLE (CASSETTE UP COMPARTMENT)

CN1001 1-561-781-11 s RECEPTACLE, BNC "VIDEO OUT"
CN1002 1-507-858-31 o JACK, PIN 1P "VIDEO OUT"
CN1003 1-507-858-41 o JACK, PIN 1P "CH-1/3 OUT"
CN1004 1-507-858-51 o JACK, PIN 1P "CH-2/4 OUT"
CN1005 1-507-858-21 o JACK, PIN 1P "MONITOR"

CN1006 1-509-095-00 s RECEPTACLE, 8P "MONITOR OUT"
CN1007 △1-560-222-11 s INLET, 3P

H1005 8-825-771-11 s HEAD, AT PS244-2103C "AUDIO/TC"
H1008 8-825-554-73 s HEAD, CTL PS244-21A "CTL"

L1 1-543-316-21 s SENSOR "TAPE BEGINING"
L2 1-543-316-21 s SENSOR "TAPE END"

M1001 8-835-179-01 s MOTOR, DC MCB2B15 "THREADING"
M1006 8-835-179-01 s MOTOR, DC MCB2B15 "L/S POSITION"
M1003 8-835-259-02 s MOTOR, DC BHF-1918A "CAPSTAN"
M1004 A-6737-175-A s MOTOR ASS'Y "S-REEL"
M1005 A-6737-175-A s MOTOR ASS'Y "T-REEL"

M1007 1-541-376-11 s MOTOR, DC DNR-4700A "UP/DOWN"

PM1001 1-454-417-41 s SOLENOID "S-BRAKE"
PM1002 1-454-417-41 s SOLENOID "T-BRAKE"
PM1003 1-454-338-00 s SOLENOID "PINCH"

S1001 △1-570-117-41 s ROCKER "POWER"

PACKING

Ref. No.

or Q'ty Part No. SP Description

△1-556-760-11 s CORD, POWER (3 CORE)
1-557-637-11 s CABLE, COMMANDER
3-701-624-00 s BAG, POLY (FOR REMOTE CONTROL UNIT)
3-701-632-00 s BAG, POLY (FOR MANUAL)
3-701-647-00 s BAG, POLY (FOR BVW-22)

3-727-008-01 o INDIVIDUAL CARTON
3-725-064-01 o CUSHION, UPPER
3-725-065-01 o CUSHION, LOWER
3-727-018-01 o TOP COVER
1-463-944-11 o REMOTE CONTROL UNIT, RM-770

Standard

products s BATTERY, SUM-3

NOTE: Please see the General Purpose Electrical List
of capacitors and resistors that are not listed in
the parts list.

17-5. FIXTURE (OPTION)

----- FIXTURE -----

Ref. No.

or Q'ty Part No. SP Description

J-6001-820-A o DRUM ECCENTRICITY GAUGE (3)
J-6001-830-A o DRUM ECCENTRICITY GAUGE (2)
J-6001-840-A o DRUM ECCENTRICITY GAUGE (1)
J-6031-820-A o MULTI CONNECTOR CABLE (DIBNC)
J-6080-011-A o REEL TABLE TENSION GAUGE

J-6086-570-A o FLATNESS PLATE
J-6087-000-A o DRUM ECCENTRICITY GAUGE (5)
J-6152-450-A o WIRE CLEARANCE GAUGE
J-6190-800-A o TENSION REGULATOR SLANTNESS CHECK GAUGE
J-6320-680-A o REEL TABLE HEIGHT GAUGE

J-6320-870-A o REEL MOTOR SHAFT SLANTNESS CHECK GAUGE
J-6320-880-A o CASSETTE REFERENCE PLATE
Y-2031-001-0 o CLEANING FLUID
2-034-697-00 o CLEANING PIECE
7-723-902-00 o INSPECTION MIRROR

7-732-050-20 o TENSION SCALE (50G FULL SCALE)
7-732-050-30 o TENSION SCALE (100G FULL SCALE)
8-960-096-51 o ALIGNMENT TAPE, CR2-1B PS
8-960-096-91 o ALIGNMENT TAPE, CR5-1B PS
8-960-098-37 o ALIGNMENT TAPE, CR5-1A PS

9-911-053-00 o THICKNESS GAUGE
Standard
products HEAD DEMAGNETIZER (HE-4)

NOTE: Please see the General Purpose Electrical List
of capacitors and resistors that are not listed in
the parts list.